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April 30, 2013

Unico Bank
Jonesboro, AR 72401

Re: **Storm Water Report**
Unico Bank Development
Jonesboro, Arkansas

VIA email: john.easley@associatedengineering.com

Attached is the Storm Water Report for the referenced project.

As you will note, the overall effect for this development is that detention will increase the peak discharge conditions of the Site Basin of Higginbottom Creek and Viney Slough Ditch. Computations and analyses for this hydrologic evaluation demonstrate that on-site detention is not warranted. The development will require both temporary and permanent erosion control measures on-site.

Should you have any questions or request additional information please call me.

Respectfully submitted,

Bernie Auld, PE
BA Engineering

Storm Water Report
Unico Bank Development
Jonesboro, Arkansas

April 30, 2013

Purpose:

The objective of this study is to analyze the hydrology of the existing site conditions and compare these conditions to the proposed conditions for the Unico Bank Development for site detention purposes. The results of the detention analyses will then be reviewed to determine the effects on Higginbottom Creek and Viney Slough Ditch to establish whether on-site detention shall be required to comply with the City of Jonesboro Storm Water Management criteria.

Location:

The proposed 48.26-acre residential development is located south of Ingles Road and east of Gladys Drive and Keely Drive (refer Appendix).

Site Detention Computations:

Storm Water runoff from the site will be conveyed across the property by overland flow, storm sewer structures, and a detention structure. Detention was analyzed at the eastern portion of the property. Due to the increase in impervious land use from this development, these areas have been routed through the basin to effectively reduce the peak flow rates to less than pre-developed conditions.

Runoff for site detention were computed using the United States Department of Interior's (USDI) Soil Conservation Service (SCS) 24-Hour Hydrograph Method. The method of calculation is computer generated using Hydraflow software. The topographic information was derived from the City of Jonesboro's LIDAR contours along with supplemental information obtained by Associated Engineering.

Maps of the site were reviewed to provide data input for the computer program. Alternatives were reviewed the 100-year storm frequency event. The detention configuration was designed to accommodate the increased peak discharge from the developed conditions. Storage routing of the proposed hydrograph through the detention facility was calculated by computer using Hydraflow software. Due to the increase in impervious land use from the development, the proposed site has been routed through the basin to effectively reduce the peak flow rates to less than pre-developed conditions.

Pre-developed Flows:
Calculations for pre-developed flows for the 100-year storm events are shown within the Appendix. A summary of the input data is shown below:

*Note: Hydrologic Soil Group Classification are based upon existing soil conditions per National Cooperative Soil Service Web Soil Survey (refer to Appendix).

Area = 48.26 acres
CN = 91 (43.26-acres CN 91, 5-acres CN 88)
Tc = 23.68 minutes

Post-developed Flows:
Calculations for post-developed flows for the 100-year storm event is shown within the Appendix. A summary of the input data is shown below:

Area = 48.26 acres
CN = 95
Tc = 9.6 minutes

Summary - Detention Pond:
The detention basin has been designed to store and reduce the discharge of multiple peak flow events of the proposed development. Computative analysis for the detention facility/basin is shown within the Appendix. A summary of the data is shown below:

Storage, Elevation, Storage, Discharge Outflow

Stage (ft)	Elev (ft)	Storage (cuft)	Culvert / Orifice (cfs)	TotalOutflow (cfs)
0	100	0	0	0
1	101	42,050	24.94 oc	24.94
2	102	88,300	62.66 oc	62.66
3	103	138,950	87.53 oc	87.53
4	104	194,200	195.72 oc	195.72
5	105	254,250	254.66 oc	254.66
6	106	319,300	288.76 oc	288.76

Pond discharge structures:
4 each at 36-inch Culvert/Orifice – invert @ 100

Summary of peak flow:

	100-year (cfs)
Pre-Developed Conditions	293.57
Post-Developed Conditions	481.43
Routed Outflow Conditions	272.78

Higginbottom Creek and Viney Slough Watershed Hydrology Computations:

Storm Water runoff rates for Higginbottom Creek and Viney Slough Ditch were computed with previous DFIRM digital HEC-1 files provided by Cater + Burgess due to the absence of the HEC-1 files provided by the Memphis District Corps of Engineers (COE) in HEC-1 format for the 100-year frequency event (1% annual chance). These files only represent the spatial dynamics of the Unico Bank site development in relationship to the site basin as well as the overall basin at that locale.

The COE HEC-1 model was then revised to reflect the discharge at the Unico Bank Development along Higginbottom Creek and Viney Slough Ditch and the impact from the proposed site conditions for the Development. The summary volumes and discharge conditions from the previous pond calculations were then edited into the same COE HEC-1 model to demonstrate the detention pond routing effects. These models demonstrate the impact the Unico Bank Development has on Higginbottom Creek and Viney Slough Ditch with detention and without detention.

Summary of peak flow rates:

	Site Basin 100-year (cfs)	Time (hr)	Overall Basin 100-year (cfs)	Time (hr)
Higginbottom Creek - Viney Slough Ditch (Exisitng Conditions)	464	13.33	4700	15.82
Unico Bank Development	426	12.08	4686	15.82
Unico Bank Development + Detention	435	13.33	4686	15.83

The HEC-1 hydrograph results for the 100-year frequency event are presented in the Appendix.

Summary results of this report are as follows:

- Unico Bank Development decreases Overall Basin discharge by 14-cfs with and without detention.
- Unico Bank Development decreases Site Basin discharge by 38-cfs and 29-cfs with and without detention (respectively).
- Unico Bank Development without detention reduces the Site Basin discharge and timeframe for higher velocities associated with longer peak time thereby reducing long term erosion of Viney Slough Ditch.

Conclusions:
The overall effect for this development is that detention will increase the peak discharge conditions of the Site Basin of Higginbottom Creek and Viney Slough Ditch. Computations and analyses for this hydrologic evaluation demonstrate that on-site detention is not warranted. Based on and limited to the data and analysis and their applicability presented herein, the development does not appear to endanger life or property, public or private.

Higginbottom Creek and Viney Slough Ditch Hydraulic Computations:

MT-2 Form 2

B. HYDRAULICS

4. Models Submitted

Duplicate Effective Model (Natural Run) Datum ??

HCCOEex.dat (HEC-2) Higginbottom Creek [RM 0.19 – RM 4.35]

Original HEC-2 Files for Higginbottom Creek per Memphis Dist COE, FEMA FIS

HCVSex.dat (HEC-2) Viney Slough Ditch [RM 17.421 – RM 22.644]
Higginbottom Creek [RM 0.19 – RM 4.35]
labeled as [RM 100.19 – RM 104.35]

Original HEC-2 Files combine Viney Slough Ditch and Higginbottom Creek per Memphis Dist COE, FEMA FIS

HCVSr2.dat (HEC-2) Viney Slough Ditch [RM 21.604 – RM 22.644]
Higginbottom Creek [RM 0.19 – RM 0.64]
labeled as [RM 100.19 – RM 100.64]

Original HEC-2 Files combine Viney Slough Ditch and Higginbottom Creek per Memphis Dist COE, FEMA FIS with files reduced to affected zone

Duplicate Effective Model (Floodwway Run) None

Corrected Effective Model (Natural Run) Datum ??

Higginbottom Viney-BA Engineering.prj Imported Plan 01

Original HEC-2 Files combine Viney Slough Ditch and Higginbottom Creek imported into HEC-RAS for affected zone

Corrected Effective Model (Floodway Run) None

Existing or Pre-Project Conditions Model (Natural Run) Datum ??

Higginbottom Viney-BA Engineering.prj COE Flow New Sections

Cross-Sections from DFIRM survey added from Sta 3541 to -4661 from Higginbottom-BA Geometric Data

Existing or Pre-Project Conditions Model (Floodway Run) None

Revised or Post Project Conditions Model (Natural Run) Datum ??

Higginbottom Creek.prj Proposed 2-5-13

An obstruction was placed above the flood event to represent the proposed fill material placed on the development from Cross-Section from Sta 130 to -2193

Revised or Post Project Conditions Model (Floodway Run) Datum ??

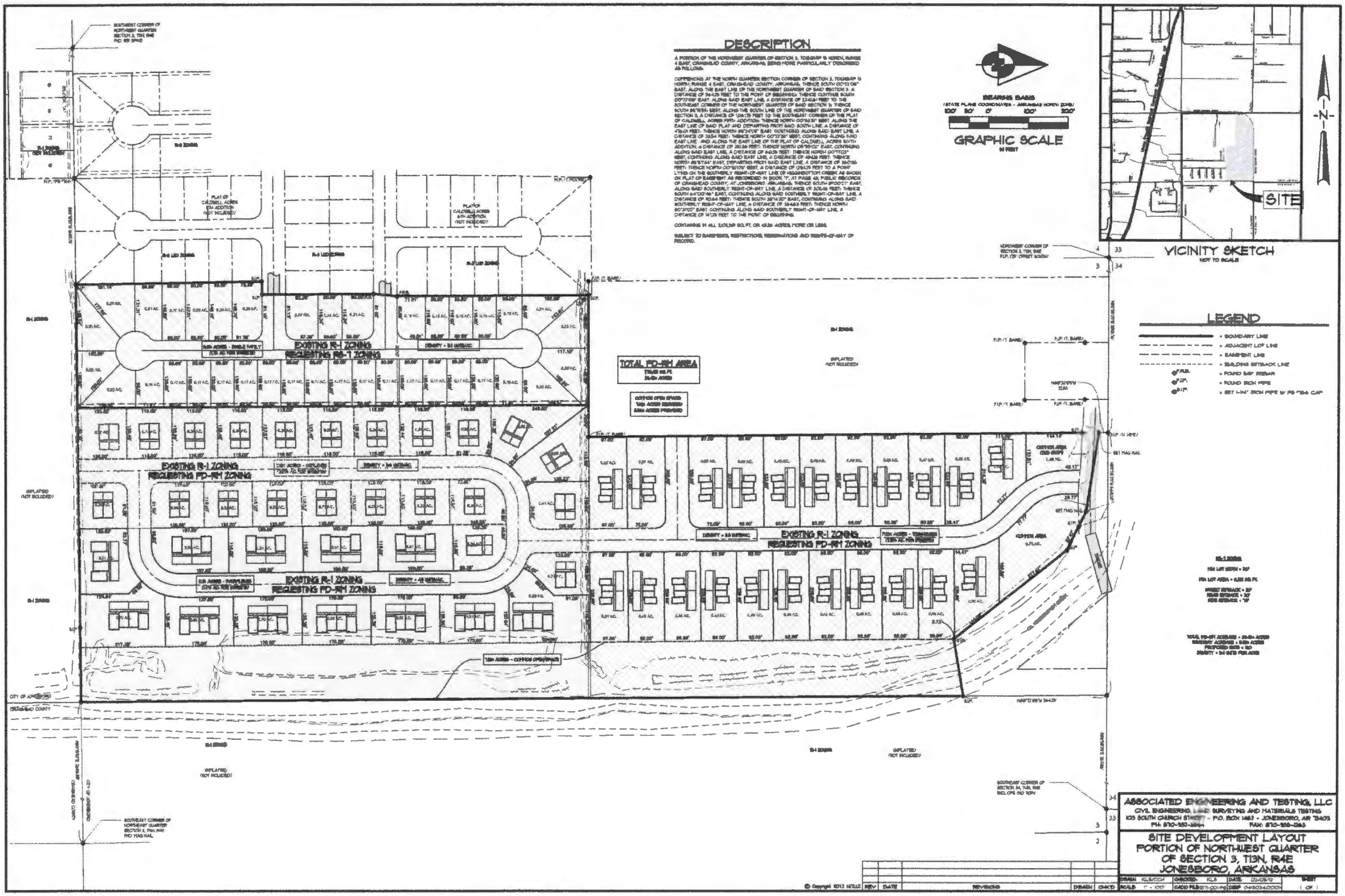
Higginbottom Creek.prj Proposed FIS 2-5-13

Other (attach description)

APPENDIX

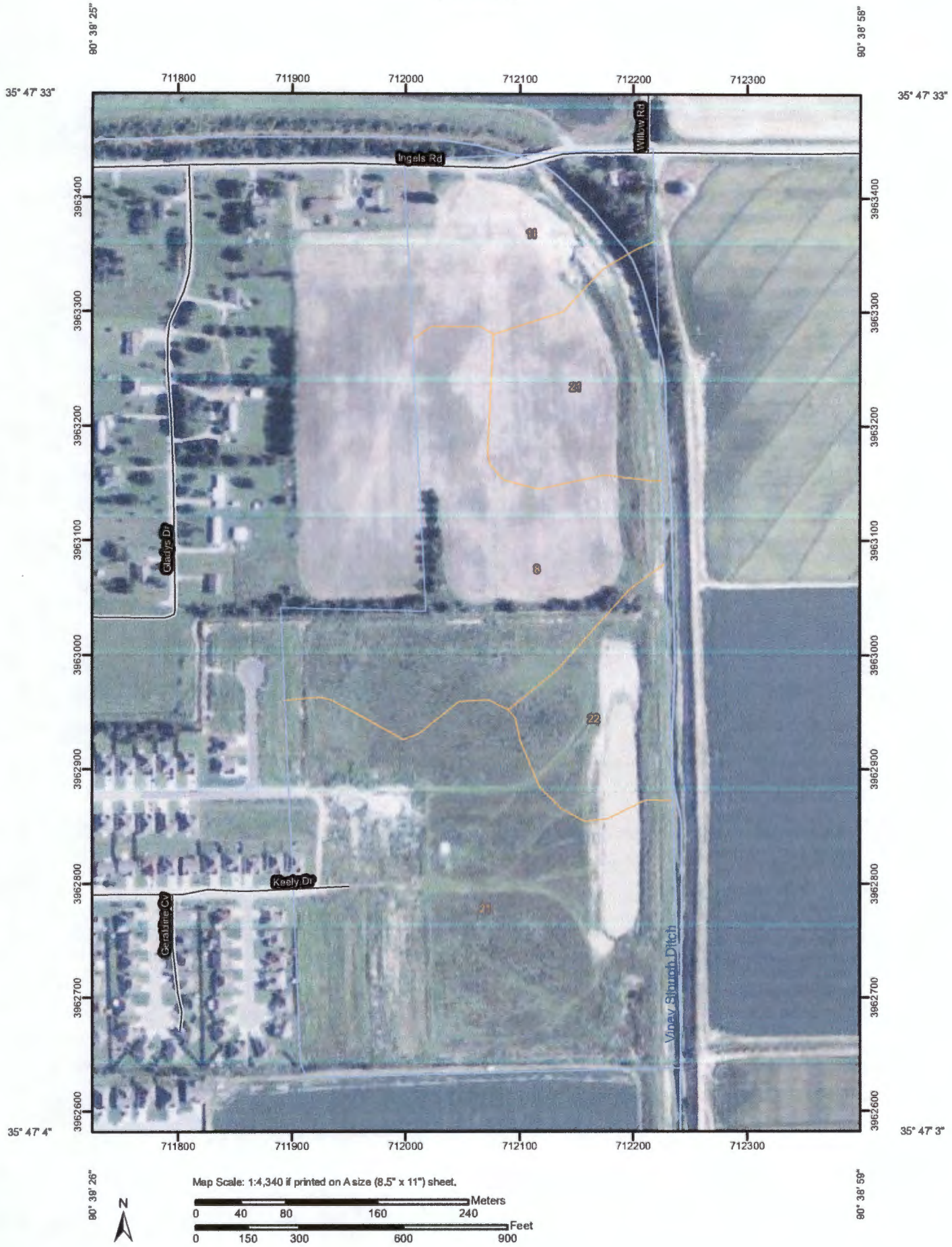
- EXISTING SITE
- PROPOSED SITE
- SOIL MAP – HYDROLOGIC SOIL GROUP
- HYDROLOGIC CALCULATIONS – POND STORAGE
- SITE BASIN AREA MAP
- HEC-1 COMPUTATIONS
  - EXISTING SITE CONDITIONS DISCHARGE
  - PROPOSED SITE CONDITIONS DISCHARGE
  - PROPOSED SITE CONDITIONS + DETENTION DISCHARGE
- HEC-2 COMPUTATIONS
  - HIGGINBOTTOM CREEK EXISTING CONDITIONS
  - HIGGINBOTTOM CREEK + VINEY SLOUGH DITCH EXISTING CONDITIONS
  - HIGGINBOTTOM CREEK + VINEY SLOUGH DITCH EXISTING CONDITIONS (STUDY REGION)
- HEC-RAS COMPUTATIONS
  - IMPORTED PLAN 01 (IMPORTED HEC-2 FILES IN HEC-RAS)
  - COE FLOW NEW CROSS SECTION (DFIRM CROSS-SECTIONS FROM STA 3541 TO -4661)
  - PROPOSED 2-5-13 (OBSTRUCTION PLACED AS FILL ON PROPOSED SITE)
  - HEC-RAS SUMMARY
  - PROPOSED FEMA FIS SUMMARY
- Current FEMA FIS Map 05031C0134C
- Proposed FEMA FIS Map
- FEMA Forms
  - MT-2 Form 1 (Overview & Concurrence Form)
  - MT-2 Form 2 (Riverine Hydrology & Hydraulics Form)
  - MT-2 Form 3 (Riverine Structures Form)


Existing Site
Map
Traffic
Ingels Rd
House Dr
Stadium Blvd
Tuman Dr
Richardson Dr
Leatherwood Dr
Keely Dr
Colony Dr
Beacon St
Bunting Dr
Jerdon Cove
Colony Park Dr
Fox Meadow Ln
Co Rd 162
Co Rd 141
Co Rd 807
Co Rd 804
Edit in Google Map Maker
Report a problem



DESCRIPTION
BEARING BASIS
GRAPHIC SCALE
VICINITY SKETCH
NOT TO SCALE
SITE
LEGEND
BOUNDARY LINE
ADJACENT LOT LINE
EASEMENT LINE
BUILDING SETBACK LINE
FOUND BAR REBAR
FOUND IRON PIPE
TOTAL PD-RM AREA
EXISTING R-1 ZONING
REQUESTING RS-7 ZONING
EXISTING R-1 ZONING
REQUESTING PD-RM ZONING
EXISTING R-1 ZONING
REQUESTING PD-RM ZONING
EXISTING R-1 ZONING
REQUESTING PD-RM ZONING
CITY OF JONESBORO
CRAIGHEAD COUNTY
ASSOCIATED ENGINEERING AND TESTING, LLC
CIVIL ENGINEERING LAND SURVEYING AND MATERIALS TESTING
SITE DEVELOPMENT LAYOUT
PORTION OF NORTHWEST QUARTER
OF SECTION 3, T13N, R4E
JONESBORO, ARKANSAS

Soil Map—Craighead County, Arkansas
(Unico Bank)



MAP LEGEND

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

Soils
- Soil Map Units

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
- Gully
- Short Steep Slope
- Other

Political Features
- Cities

Water Features
- Streams and Canals

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

MAP INFORMATION

Map Scale: 1:4,340 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:20,000.

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 accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 15N NAD83

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

Soil Survey Area: Craighead County, Arkansas
Survey Area Data: Version 11, Sep 28, 2012

Date(s) aerial images were photographed: Data not available.

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

Craighead County, Arkansas (AR031)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
8	Calhoun silt loam	13.3	24.1%
11	Collins silt loam, occasionally flooded	7.1	12.9%
21	Falaya silt loam, occasionally flooded	29.7	54.0%
22	Foley silt loam	5.0	9.0%
Totals for Area of Interest		**55.0**	**100.0%**

Appendix A Hydrologic Soil Groups

Soils are classified into hydrologic soil groups (HSG's) to indicate the minimum rate of infiltration obtained for bare soil after prolonged wetting. The HSG's, which are A, B, C, and D, are one element used in determining runoff curve numbers (see chapter 2). For the convenience of TR-55 users, exhibit A-1 lists the HSG classification of United States soils.

The infiltration rate is the rate at which water enters the soil at the soil surface. It is controlled by surface conditions. HSG also indicates the transmission rate—the rate at which the water moves within the soil. This rate is controlled by the soil profile. Approximate numerical ranges for transmission rates shown in the HSG definitions were first published by Musgrave (USDA 1955). The four groups are defined by SCS soil scientists as follows:

Group Asoils have low runoff potential and high infiltration rates even when thoroughly wetted. They consist chiefly of deep, well to excessively drained sand or gravel and have a high rate of water transmission (greater than 0.30 in/hr).

Group Bsoils have moderate infiltration rates when thoroughly wetted and consist chiefly of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. These soils have a moderate rate of water transmission (0.15-0.30 in/hr).

Group Csoils have low infiltration rates when thoroughly wetted and consist chiefly of soils with a layer that impedes downward movement of water and soils with moderately fine to fine texture. These soils have a low rate of water transmission (0.05-0.15 in/hr).

Group Dsoils have high runoff potential. They have very low infiltration rates when thoroughly wetted and consist chiefly of clay soils with a high swelling potential, soils with a permanent high water table, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. These soils have a very low rate of water transmission (0-0.05 in/hr).

In exhibit A-1, some of the listed soils have an added modifier; for example, "Abrazo, gravelly." This refers to a gravelly phase of the Abrazo series that is found in SCS soil map legends.

Disturbed soil profiles

As a result of urbanization, the soil profile may be considerably altered and the listed group classification may no longer apply. In these circumstances, use the following to determine HSG according to the texture of the new surface soil, provided that significant compaction has not occurred (Brakensiek and Rawls 1983).

HSG	*Soil textures*
A	Sand, loamy sand, or sandy loam
B	Silt loam or loam
C	Sandy clay loam
D	Clay loam, silty clay loam, sandy clay, silty clay, or clay

Drainage and group D soils

Some soils in the list are in group D because of a high water table that creates a drainage problem. Once these soils are effectively drained, they are placed in a different group. For example, Ackerman soil is classified as A/D. This indicates that the drained Ackerman soil is in group A and the undrained soil is in group D.

Exhibit A: Hydrologic Soil Groups for the United States

CHICOTE ..... D	CHUMMY ..... D	CLIMAX ..... D	COLDSPRING ..... B
CHIDAGO ..... A	CHUNILNA ..... D	CLINE ..... D	COLEMAN C
CHIEFLAND ..... B	CHUNKMONK C	CLINEFALLS ..... A	COLEMANTOWN ..... C/D
CHIGLEY C	CHUPE ..... A	CLINETOP ..... D	COLEPOINT ..... B
CHILAO C	CHURCH ..... D	CLINGMAN ..... D	COLERIDGE C
CHILCOTT C	CHURCH SPRINGS ..... B	CLINKENBEARD ..... D	COLFAX C
CHILDS ..... B	CHURCHVILLE ..... D	CLIPPER ..... C/D	COLFER ..... A
CHILGREN C	CHURUBUSCO ..... D	CLIQUOT C	COLHILL ..... B
CHILHOWEE ..... B	CHUTE ..... A	CLITHERALL ..... B	COLIBRO ..... B
CHILICOTAL ..... B	CHUTUM ..... B	CLODINE ..... D	COLINAS ..... B
CHILLICOTHE ..... B	CIALES ..... D	CLOQUALLUM C	COLLEGECREEK ..... B
CHILLIGAN ..... B	CIBEQUE ..... B	CLOQUET ..... B	COLLETT ..... C/D
CHILLUM ..... B	CID C	CLOSKEY C	COLLIER ..... A
CHILLYBU ..... D	CIDERMILL ..... B	CLOTHO ..... C/D	COLLINGTON ..... B
CHILOQUIN ..... D	CIDRAL C	CLOUD PEAK ..... B	COLLINS C
CHILSON ..... D	CIENEGA ..... B	CLOUDCROFT ..... D	COLLISTER ..... B
CHIMAY ..... D	CIENO ..... D	CLOUDLAND C	COLMA ..... B
CHIME C	CIERVO C	CLOUDLESS C	COLNEVEE ..... B
CHIMINET ..... D	CIFIC C	CLOUGH ..... D	COLOMEX ..... B
CHIMNEY ..... A	CINCO ..... A	CLOVELLY ..... D	COLONVILLE C
CHIMNEYROCK ..... B	CINDERHURST ..... D	CLOVER SPRINGS ..... B	COLORADO ..... B
CHINA ..... D	CINNAMON BAY ..... B	CLOVERCREEK C	COLOROCK ..... D
CHINABUTTE ..... D	CINTRONA ..... D	CLOWERS ..... B	COLOROW ..... B
CHINAHAT ..... B	CIRCLE ..... B	CLOWERS ..... B/C	COLPIEN ..... B
CHINCAP ..... B	CIRCLEBACK ..... A	CLOWFIN ..... B	COLSAVAGE C
CHINCOTEAGUE ..... D	CIRCLEBAR C	CLOYD ..... D	COLUMBINE ..... A
CHINDE C	CIRCLEVALLEY ..... B	CLUBCAF ..... D	COLUMBUS C
CHINHILL ..... B	CIRCULAR ..... B	CLUNIE ..... D	COLUSA C
CHINIAK ..... A	CISCO ..... B	CLUNTON ..... D	COLVARD ..... B
CHINKLE ..... D	CISPUS ..... B	COACHELLA ..... B/C	COLVILLE ..... C/D
CHINLINI ..... B	CITICO ..... B	COAHUILA ..... B	COLY ..... B
CHINO ..... B/C	CITRONELLE ..... D	COALDALE ..... D	COLYELL C
CHINVAR C	CITYPOINT ..... A/D	COALDRAW ..... D	COLYER ..... D
CHINWHISKER ..... A	CLACKAMAS ..... D	COALGATE ..... D	COMAR C
CHIPENDALE ..... D	CLAMP ..... D	COAMO C	COMBE ..... B
CHIPENHILL ..... D	CLANA ..... A	COARSEGOLD C	COMBEST ..... B
CHIPLEY C	CLANALPINE C	COARSEWOOD ..... B	COMBS ..... B
CHIPOLA ..... A	CLAPHAM C	COATSBURG ..... D	COMER ..... B
CHIPPENY ..... D	CLARA ..... B/D	COBATUS C	COMETCRIK ..... D
CHIRENO ..... D	CLARA ..... D	COBB ..... B	COMFORT ..... D
CHISMORE ..... D	CLARENA ..... B	COBBLANK ..... D	COMFREY ..... D
CHISOLM ..... A	CLARENCE ..... D	COBEN ..... D	COMITAS ..... A
CHISPA ..... B	CLARENDON C	COBERLY ..... B	COMO ..... A
CHISTNA ..... B	CLARESON C	COBERLY, Low Rainfall C	COMPASS ..... B
CHISTOCHINA ..... B	CLAREVILLE C	COBEY ..... B	COMSTOCK C
CHITA ..... B	CLARITA ..... D	COBLENTZ C	COMUS ..... B
CHITINA ..... B	CLARK ..... B	COBLYNN ..... B	CONA C
CHITTUM C	CLARKIA C	COBOC C	CONABY ..... B/D
CHITWOOD ..... D	CLARKRANGE C	COBRE C	CONALB ..... B
CHIVATO C	CLARKSDALE C	COBSTONE ..... B	CONANT C
CHIVATO, Elevation>8000 ..... D	CLARKSTONE ..... B	COCHINA ..... D	CONATA ..... D
CHIWAUKUM ..... B	CLAUNCH ..... B	COCHRAN C	CONBOY ..... D
CHIWAWA ..... B	CLAVERACK C	COCKSCOMB C	CONCEPCION ..... D
CHO C	CLAYBANKS ..... C/D	COCOA ..... A	CONCHAS C
CHOATES C	CLAYCREEK C	COCODRIE C	CONCHOVAR C
CHOCCOLOCCO ..... B	CLAYHAM ..... B	COCOLALLA ..... C/D	CONCORD ..... D
CHOCK ..... D	CLAYHOLE ..... B	COCONINO ..... B	CONCORDIA ..... D
CHOCKTOOT ..... B	CLAYSVILLE C	COD ..... B	CONDA ..... D
CHOCORUA ..... D	CLAYTON ..... B	CODORUS C	CONDIDO ..... D
CHOICE ..... D	CLE ELUM C	CODQUIN ..... D	CONDIT ..... D
CHOKE ..... B	CLEARCREEK ..... D	CODYLAKE ..... B	CONDON C
CHOOP ..... D	CLEARFORK ..... D	COE ..... A	CONECUH ..... D
CHORALMONT ..... A	CLEARLINE ..... B	COESSE ..... C/D	CONETOE ..... A
CHOSKA ..... B	CLEARRIVER ..... B	COFF C	CONEWARD ..... A
CHOTEAU C	CLEARVIEW ..... B	COFFEE ..... B	CONGAREE ..... B
CHOWAN ..... D	CLEAVMOR ..... D	COFFEEN ..... B	CONGLE ..... B
CHRIS C	CLEGHORN C	COFFEEPOT ..... B	CONICAL ..... B
CHRISHALL ..... B	CLEMENTINE ..... B/C	COFFTON ..... B	CONLEN ..... B
CHRISMAN ..... D	CLEMVILLE ..... B	COGHILL C	CONLEY C
CHRISTIANA C	CLENAGE C	COGLIN C	CONNAH ..... D
CHRISTIANBURG C	CLENDENEN ..... D	COHAGEN C	CONNERIDGE C
CHRISTINE ..... D	CLEONE ..... B	COHAGEN, Cool ..... D	CONNET ..... D
CHRISTOFF C	CLEORA ..... B	COHAS C	CONOSTA C
CHRISTY C	CLERGERN ..... B	COHOE ..... B	CONOTTON ..... B
CHROME C	CLERMONT ..... D	COILE ..... D	CONOVER C
CHRYSLER C	CLEVELAND C	COILS C	CONOWINGO C
CHUBBFLAT C	CLEVESCOVE ..... B	COIT ..... D	CONPEAK ..... D
CHUCKANUT ..... B	CLEYMOR ..... B	COKATO ..... B	CONQUISTA ..... D
CHUCKRIDGE ..... D	CLICK ..... A	COKEDALE ..... C/D	CONRAD ..... A/D
CHUCKRIVER ..... D	CLIFF ..... B	COKER ..... D	CONSEJO C
CHUFFA ..... B	CLIFFDELL ..... B	COKEVILLE ..... B	CONSER ..... D
CHUGCREEK C	CLIFFIELD ..... B	COLBE ..... D	CONSTABLE ..... A
CHUGTER ..... B	CLIFFORD C	COLBERT ..... D	CONSTANCE ..... D
CHUICHU ..... D	CLIFFSIDE ..... B	COLBURN C	CONSTANCIA ..... D
CHUIT ..... B	CLIFTY ..... B	COLDENT C	CONSUMO ..... B

Exhibit A: Hydrologic Soil Groups for the United States

EGAM C	ELMER C	EREMIS ..... B	EXETER ..... B
EGAN ..... B	ELMINA C	ERICSON ..... B	EXTEND C
EGANROC C	ELMONT ..... B	ERIG ..... B	EXUM C
EGGLAKE ..... C/D	ELMRIDGE C	ERIN ..... B	EXWAY ..... B
EGGLESON ..... B	ELMVILLE ..... B	ERMABELL ..... A	EYAK C
EGHELM C	ELMWOOD C	ERMATINGER ..... B/D	EYERBOW C
EGLIN ..... A	ELNORA ..... B	ERNBET C	EYLAU C
EGLIRIM C	ELOCHOMAN ..... B	ERNO ..... B	EYOTA ..... A
EGUAJE ..... B	ELOCIN ..... D	ERRAMOUSPE C	EZEL ..... B
EGYPT ..... D	ELON ..... B	ERVIDE C	EZELL C
EGYPTCREEK C	ELOSO ..... D	ESAU ..... A	FABIUS ..... B
EICKS C	ELPAM ..... D	ESCAMBIA C	FACEVILLE ..... B
EIGHTLAR C	ELPASO ..... B/D	ESCANABA ..... A	FACEY ..... B
EIGHTMILE ..... D	ELRED ..... B/D	ESCANO C	FACTORY ..... B
EILERTSEN ..... B	ELRIN ..... B	ESCARLO ..... B	FADDIN ..... D
EINE ..... D	ELROSE ..... B	ESCONDIDO/ Thick Solum ..... B	FADOLL ..... B
EITZEN ..... B	ELSIE ..... B	ESCONDIDO C	FAGAN C
EKAH C	ELSINBORO ..... B	ESEL ..... B	FAGASA C
EKAL ..... D	ELTOPIA C	ESHA ..... B	FAGES ..... D
EKIM C	ELTSAC ..... D	ESHAMY ..... B	FAHNESTOCK ..... B
EKOMS ..... B	ELVERS ..... B/D	ESKA ..... B	FAIM ..... B
EKRUB ..... D	ELVIRA ..... B/D	ESMERALDA ..... B	FAIRANGEL ..... B
EL PECO C	ELWELL C	ESMOD ..... D	FAIRBERG C
ELAM ..... A	ELWHA C	ESPARTO ..... B	FAIRBIRCH C
ELAM, Hard Substratum ..... B	ELWOP ..... B	ESPELIE ..... B/D	FAIRBURN ..... D
ELANDCO ..... B	ELY ..... B	ESPERANZA C	FAIRCHILD C
ELBA C	ELYSIAN ..... B	ESPIL ..... D	FAIRFAX ..... B
ELBAVILLE ..... B	EMACHAYA ..... D	ESPINAL ..... A	FAIRHAVEN ..... B
ELBERT ..... D	EMAGERT ..... B	ESPINOSA ..... B	FAIRLESS ..... B
ELBON ..... B	EMBAL ..... B	ESPINT ..... D	FAIRLIE ..... D
ELBOW C	EMBERTON C	ESPY ..... D	FAIRLO ..... B
ELBOWLAKE ..... B	EMELINE ..... D	ESRO ..... D	FAIRMOUNT ..... D
ELBUCK ..... B	EMERALDA ..... D	ESSEN C	FAIRPLAY ..... D
ELBUTTE ..... D	EMERSON ..... B	ESTACION ..... B	FAIRSMITH ..... B
ELCANEJO ..... B	EMERY ..... B	ESTATE C	FAIRYDELL C
ELCAPITAN ..... B	EMIGHA ..... B	ESTELLE ..... B	FAIRYLAWN ..... D
ELD ..... B	EMIGHA, Alkaline C	ESTELLINE ..... B	FAJADA C
ELDADO ..... B	EMILY ..... B	ESTER, Thawed C	FAJARDO C
ELDER HOLLOW ..... D	EMMA C	ESTER ..... D	FALAYA ..... D
ELDERON, Stony ..... A	EMMERT ..... A	ESTERO ..... D	FALBA ..... D
ELDERON ..... B	EMOT ..... B	ESTESLAKE ..... D	FALERIA ..... B
ELDRIDGE C	EMPIRE ..... B	ESTO ..... B	FALFA C
ELEMENTS ..... B	EMYD ..... B	ETACH C	FALFURRIAS ..... A
ELENORE ..... D	ENBAR ..... B	ETHEL C	FALK C
ELEROY ..... B	ENBAR, Stony C	ETHELMAN ..... B	FALKIRK ..... B
ELEVASIL ..... B	ENBAR, Wet ..... D	ETHETE ..... B	FALKNER C
ELEVATOR C	ENCANTADO ..... A	ETHETE, Saline C	FALLBROOK ..... B
ELFCREEK C	ENCHANTED ..... B	ETIL ..... A	FALLCREEK C
ELFLINT ..... B	ENCICADO C	ETOILE ..... D	FALLERT ..... B
ELGEE ..... A	ENCINA ..... B	ETOWAH ..... B	FALLON ..... B
ELGIN C	ENCROW ..... D	ETOWN ..... B	FALLSINGTON ..... B/D
ELIAS C	ENDERSBY ..... B	ETTER ..... B	FALSEN ..... A
ELIZABETH ..... B	ENERGY ..... B	ETTRICK ..... B/D	FANAL C
ELK HOLLOW ..... B	ENFIELD ..... B	EUCHRAND ..... D	FANCHER C
ELKADER ..... B	ENGADINE ..... B/D	EUCHRE C	FANDOW ..... D
ELKHEIGHT C	ENGLE ..... B	EUCLID C	FANNO C
ELKHEIGHTS ..... B	ENKO ..... A	EUDY C	FANSHAW ..... B
ELKHORN ..... B	ENKO, Overblown ..... B	EUER ..... B	FANTZ, High Rainfall ..... B
ELKINSVILLE ..... B	ENLOE ..... D	EUFAULA ..... A	FANTZ C
ELKINTON ..... B	ENNING ..... D	EUHARLEE C	FANU ..... B
ELKMOUND ..... D	ENOCHVILLE ..... C/D	EULONIA C	FARBER ..... B
ELKPRAIRIE ..... B	ENOLA ..... B	EUNOLA C	FARDRAW ..... B
ELKRIDGE ..... B	ENOREE ..... D	EUREKA ..... D	FARDRAW, Dark Surface C
ELKTON ..... C/D	ENOS C	EUSBIO C	FARISITA ..... D
ELKWALOW ..... D	ENOSBURG C	EUSTIS ..... A	FARLOW C
ELLA ..... B	ENSENADA ..... B	EUTAW ..... D	FARMERSTOWN C
ELLEN ..... B	ENSTROM ..... B	EUTROBORALFS ..... B	FARMINGTON C
ELLENA C	ENTENTE ..... B	EVA ..... B	FARMTON ..... D
ELLETT ..... D	ENTERO ..... D	EVADALE ..... D	FARNHAMTON C
ELLICOTT ..... A	ENTERPRISE ..... B	EVANGELINE C	FARNUF C
ELLIJAY ..... B	ENVILLE C	EVANOT ..... B	FARQUAR ..... B
ELLINGTON ..... B	ENVOL ..... D	EVANSHAM ..... D	FARRAGUT C
ELLINOR C	ENZIAN ..... D	EVANT ..... D	FARRENBURG ..... B
ELLIOTT C	EODY C	EVART ..... D	FARRINGTON ..... B
ELLIS ..... D	EOJ ..... D	EVELETH C	FARROT C
ELLISTON C	EOLA ..... D	EVENDALE C	FARRY ..... B
ELLISVILLE ..... B	EPHRATA, Cool ..... A	EVERETT ..... B	FARSIDE ..... B
ELLOREE ..... D	EPHRATA ..... B	EVERGLADES ..... B/D	FARSON C
ELLSBURG ..... C/D	EPITAPH ..... D	EVERGREEN ..... D	FARVA C
ELLUM C	EPLEY C	EVERMAN C	FARVANT ..... D
ELLWOOD C	EPOT ..... B	EVERRY ..... B	FARVIEW ..... D
ELLZEY ..... B/D	EPSOM ..... B/D	EVICK ..... A	FARWAY ..... B
ELM LAKE ..... A/D	EPVIP ..... D	EWAN ..... D	FASHING ..... D
ELMDALE ..... B	ERAM C	EXCLOSE ..... B	FASKIN ..... B
ELMENWOOD ..... D	ERD ..... D	EXEL C	FATIMA ..... B

Exhibit A: Hydrologic Soil Groups for the United States

FATTIG C
FAUNCE ..... A
FAUNSDALE ..... D
FAVORETTA ..... D
FAVRET C
FAWCETT ..... B
FAWIN ..... B
FAWNSPRING C
FAYETTEVILLE ..... B
FE ..... D
FEAGINRANCH ..... D
FEARS ..... B
FEATHER ..... B
FEATHERSTONE ..... D
FEDJI ..... A
FEDORA ..... B/D
FELDA ..... D
FELDHAUSER ..... B
FELDTMAN ..... A
FELICIANA ..... B
FELICITY ..... A
FELIPE ..... D
FELIX ..... D
FELKER C
FELLA ..... B/D
FELOR ..... B
FELT ..... B
FELTA C
FELTNER ..... D
FENELON C
FEPS ..... D
FERA C
FERBALL C
FERD C
FERDELFORD C
FEREBEE ..... D
FERGIE C
FERGUS ..... B
FERGUSON ..... B
FERN ..... B
FERN CLIFF ..... B
FERNCREEK ..... D
FERNDALE ..... B
FERNHAVEN ..... B
FERNOW ..... B
FERNPOINT ..... B
FERNWOOD ..... B
FERRELO ..... B
FERROBURRO ..... D
FERTEG C
FESSLER ..... B
FESTINA ..... B
FETCH ..... D
FETERITA ..... D
FETT ..... D
FETZER C
FEZ C
FEZIP ..... D
FIANDER ..... C/D
FIAT C
FIBRE ..... B/D
FICO ..... B
FIDALGO C
FIDDLETOWN ..... B
FIDDYMENT ..... D
FIDISIX ..... B
FIELDCREEK ..... B
FIELDING ..... B
FIELDON ..... B/D
FIFESRIDGE ..... B
FIFIELD C
FIG ..... B
FIGARO C
FIKEL C
FILBERT ..... D
FILION ..... D
FILIRAN ..... D
FINAL ..... D
FINCHFORD ..... A
FINDOUT ..... D
FINLAND C
FINN ..... D
FINNEY ..... B
FINOL C
FINROD C

FIRCREEK C
FIREBALL ..... B
FIREBAUGH C
FIRESTEEL ..... B
FIRESTONE C
FIRETOWER ..... B
FIRMAGE C
FIROKE ..... B
FIRTH ..... B/C
FISHAVEN C
FISHBERRY ..... D
FISHERHILL ..... B
FISHERMAN ..... D
FISHHOOK ..... D
FISHLAKE ..... D
FISHPOT C
FISHROCK ..... D
FISHWAY ..... B
FISK ..... B
FITZHUGH ..... B
FITZWIL ..... B
FIVEBLOCK C
FIVEMILE ..... B
FIVEMILE, Saline C
FIVES ..... B
FIVESPRINGS C
FLACKVILLE C
FLAGG ..... B
FLAGSTAFF ..... D
FLAMBEAU ..... B
FLAMEN C
FLAMING ..... A
FLANAGAN ..... B
FLANDREAU ..... B
FLANE C
FLANK ..... D
FLANLY ..... B
FLANNERY ..... B
FLARM C
FLAT HORN ..... B
FLATCREEK ..... D
FLATHEAD ..... B
FLATIRONS C
FLATONIA ..... D
FLATSTONE C
FLATTOP ..... D
FLATWOODS C
FLAXTON ..... B
FLEAK C
FLEAK, cool ..... D
FLEENER ..... B
FLEER ..... D
FLEISCHMANN ..... D
FLEMING C
FLEMINGTON ..... D
FLETCHER ..... B
FLEWSIE ..... B
FLINK ..... B
FLINTCREEK ..... D
FLO ..... A
FLOER ..... D
FLOKE C
FLOMATON ..... A
FLOMOT ..... B
FLOODWOOD ..... B
FLORAHOME ..... A
FLORALA C
FLORAS C
FLORAVILLE ..... D
FLORENCE C
FLORESVILLE C
FLORIDANA ..... B/D
FLORIN C
FLORIS ..... B
FLOTAG ..... B
FLOTT ..... B
FLOUTIER ..... B
FLOYD ..... B
FLUE C
FLUE, Gravelly ..... D
FLUETSCH ..... B
FLUKER C
FLUMECREEK ..... B
FLUMEVILLE ..... D
FLUVAQUENTS ..... D

FLYCREEK C
FLYNN ..... B
FLYVALLEY C
FOAD C
FOARD ..... D
FOGGYFLAT ..... B
FOGLAKE C
FOLAVAR, Elevation 6000-7400 .. A
FOLAVAR ..... B
FOLDAHL ..... B
FOLEY ..... D
FOLLET ..... D
FOMSENG C
FONDA ..... D
FONDILLAS ..... D
FONNER ..... B
FONS ..... B
FONTAFLORA ..... A
FONTAINE ..... B
FONTANA ..... B
FOOLHEN, Stony, Cool ..... B
FOOLHEN ..... D
FOOTHILL C
FOPIANO ..... D
FORAKER ..... D
FORBAR ..... D
FORBES C
FORBESVILLE C
FORBING ..... D
FORDBUTTE ..... B
FORDCREEK ..... B
FORDICE ..... B
FORDNEY ..... A/C
FORDSTERROR C
FORDTOWN ..... B
FORDTRAN C
FORELAND ..... D
FORELEFT ..... B
FORESTBURG ..... A
FORESTCITY ..... B/D
FORESTDALE ..... D
FORESTER C
FORESTON C
FORK C
FORKHORN ..... B
FORLORN ..... B
FORMADER C
FORMDALE ..... B
FORNOR ..... B
FORSEER C
FORSGREN ..... B
FORSGREN C
FORT MEADE ..... A
FORT MOTT ..... A
FORT ROCK ..... A
FORTBENTON C
FORTBOIS ..... A
FORTESCUE ..... C/D
FORTRAN ..... B
FORTSAGE ..... B
FORTUNA ..... D
FORTYONE ..... B
FOSS ..... B
FOSSILON ..... D
FOSTERBURG ..... D
FOSTORIA ..... B
FOUNTAIN ..... D
FOUNTAINVILLE C
FOUR STAR ..... B/C
FOURCHE ..... B
FOURCORNERS ..... D
FOURLOG ..... D
FOURME ..... B
FOURSIXES C
FOURWHEEL ..... D
FOXCAN ..... D
FOXCREEK ..... C/D
FOXHOME ..... B
FOXLAKE C
FOXMOUNT C
FOXVILLE ..... D
FOXVIRE ..... B
FOXWORTH ..... A
FRADDLE ..... B
FRAGUNI ..... B

FRAILEY ..... B
FRAILTON ..... D
FRANCIS ..... A
FRANCISQUITO C
FRANCITAS ..... D
FRANCONIA ..... B
FRANEAU ..... D
FRANKCREEK ..... B
FRANKENMUTH C
FRANKENSTEIN C
FRANKFORT C
FRANKIRK C
FRANKLIN ..... B
FRANKTOWN ..... D
FRAVAL, Gravelly ..... B
FRAVAL C
FRAZERTON ..... B
FRED C
FREDA ..... D
FREDENSBORG C
FREDERICKTOWN ..... B
FREDONYER C
FREDRIKSDAL ..... D
FREE ..... B/D
FREEBURG C
FREECE ..... D
FREEHOLD ..... B
FREELAND C
FREELS ..... B
FREEMAN C
FREEMANVILLE ..... B
FREEON ..... B
FREER C
FREESOIL ..... B
FREEST C
FREESTONE C
FREETPEAK ..... B
FREEWATER ..... B
FREEZENER ..... B
FREEZEOUT ..... B
FRELSBURG ..... D
FREMKLE C
FRENCH C
FRENCHJOHN C
FRENCHMAN ..... B
FRENCHMILL ..... B
FRENCHOLLOW, Moist C
FRENCHOLLOW ..... D
FRESHWATER ..... D
FRESNO, Thick Solum C
FRESNO, Saline Alkali ..... D
FREWA ..... B
FREWSBURG C
FREYA ..... A/D
FRIANA ..... D
FRIBERG ..... B/D
FRICABA ..... B
FRIEDLANDER C
FRIENDLY ..... D
FRIENDS C
FRIES ..... D
FRINDLE C
FRINES C
FRINT C
FRIO ..... B
FRIONA C
FRIOTON C
FRIPP ..... A
FRISITE ..... B
FRITSLAND ..... B
FRIZZELL C
FRODO ..... D
FROHMAN C
FROLIC ..... B
FRONDORF ..... B
FRONTENAC ..... B
FRONTIER C
FRONTON ..... D
FROZARD C
FRUITA ..... B
FRUITFIELD ..... A
FRUITLAND ..... B/C
FRUITVALE C
FRYINGPAN ..... D
FRYMIRE C

Hydrograph Summary Report

Hydraflow Hydrographs by Intelisolve v9.22

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph description
1	SCS Runoff	293.57	2	728	1,143,041	—	———	———	Unico Bank Existing
3	SCS Runoff	481.43	2	718	1,253,015	—	———	———	Unico Bank Development
4	Reservoir	272.78	2	724	1,253,000	3	105.54	287,796	Detention

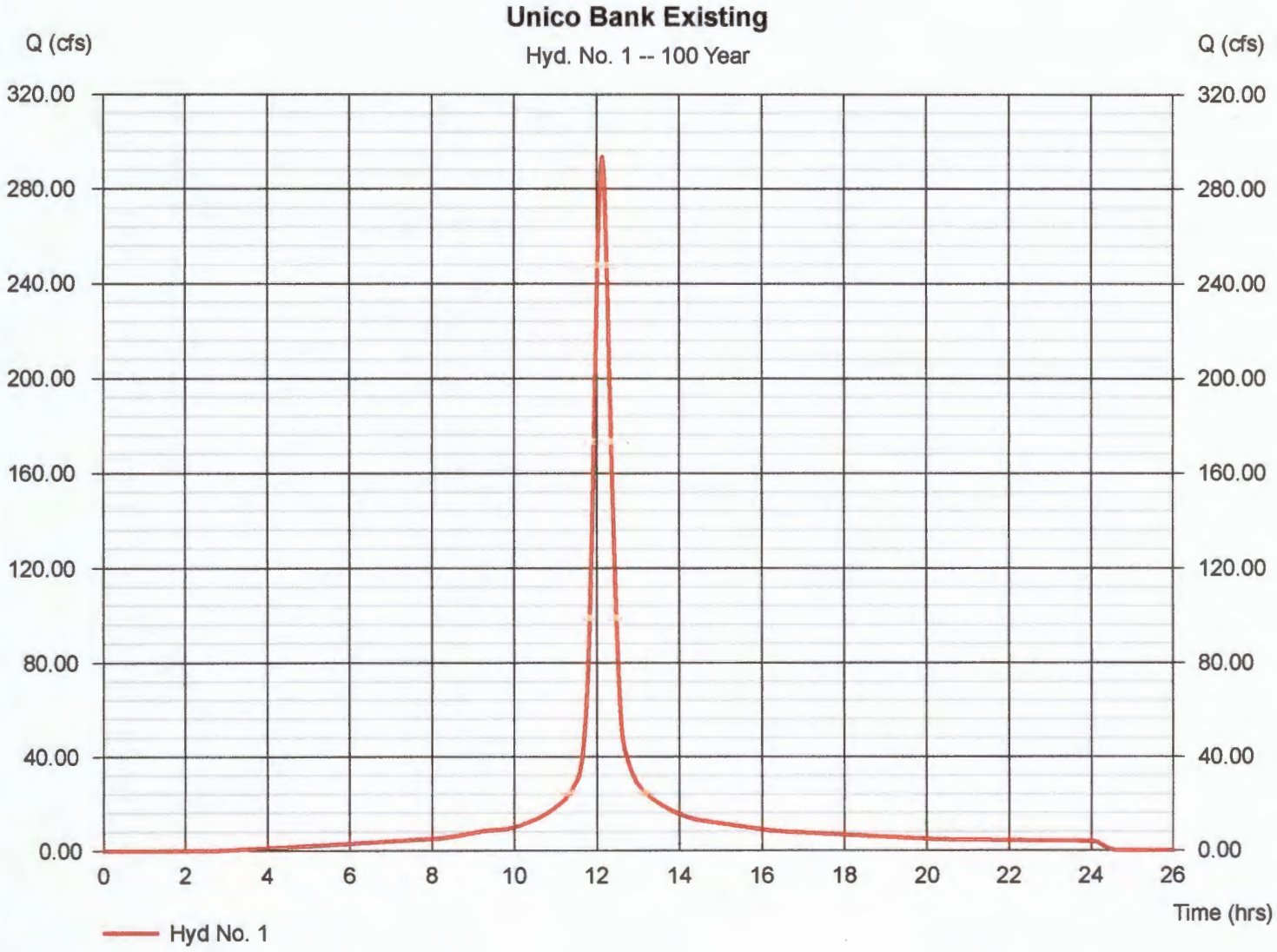
Hydrograph Report

Hyd. No. 1

Unico Bank Existing

Hydrograph type	= SCS Runoff	Peak discharge	= 293.57 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.13 hrs
Time interval	= 2 min	Hyd. volume	= 1,143,041 cuft
Drainage area	= 48.260 ac	Curve number	= 91*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 23.68 min
Total precip.	= 7.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(43.260 x 91) + (5.000 x 88)] / 48.260



TR55 Tc Worksheet

Hyd. No. 1

Unico Bank Existing

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.011		0.011		0.011		
Flow length (ft)	= 0.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 0.00		0.00		0.00		
Land slope (%)	= 0.00		0.00		0.00		
Travel Time (min)	**= 0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
Shallow Concentrated Flow							
Flow length (ft)	= 1025.00		0.00		0.00		
Watercourse slope (%)	= 0.20		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	= 0.72		0.00		0.00		
Travel Time (min)	**= 23.68**	**+**	**0.00**	**+**	**0.00**	**=**	**23.68**
Channel Flow							
X sectional flow area (sqft)	= 0.00		0.00		0.00		
Wetted perimeter (ft)	= 0.00		0.00		0.00		
Channel slope (%)	= 0.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	= 0.00		0.00		0.00		
Flow length (ft)	= 0.0		0.0		0.0		
Travel Time (min)	**= 0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**

Total Travel Time, Tc ..... 23.68 min

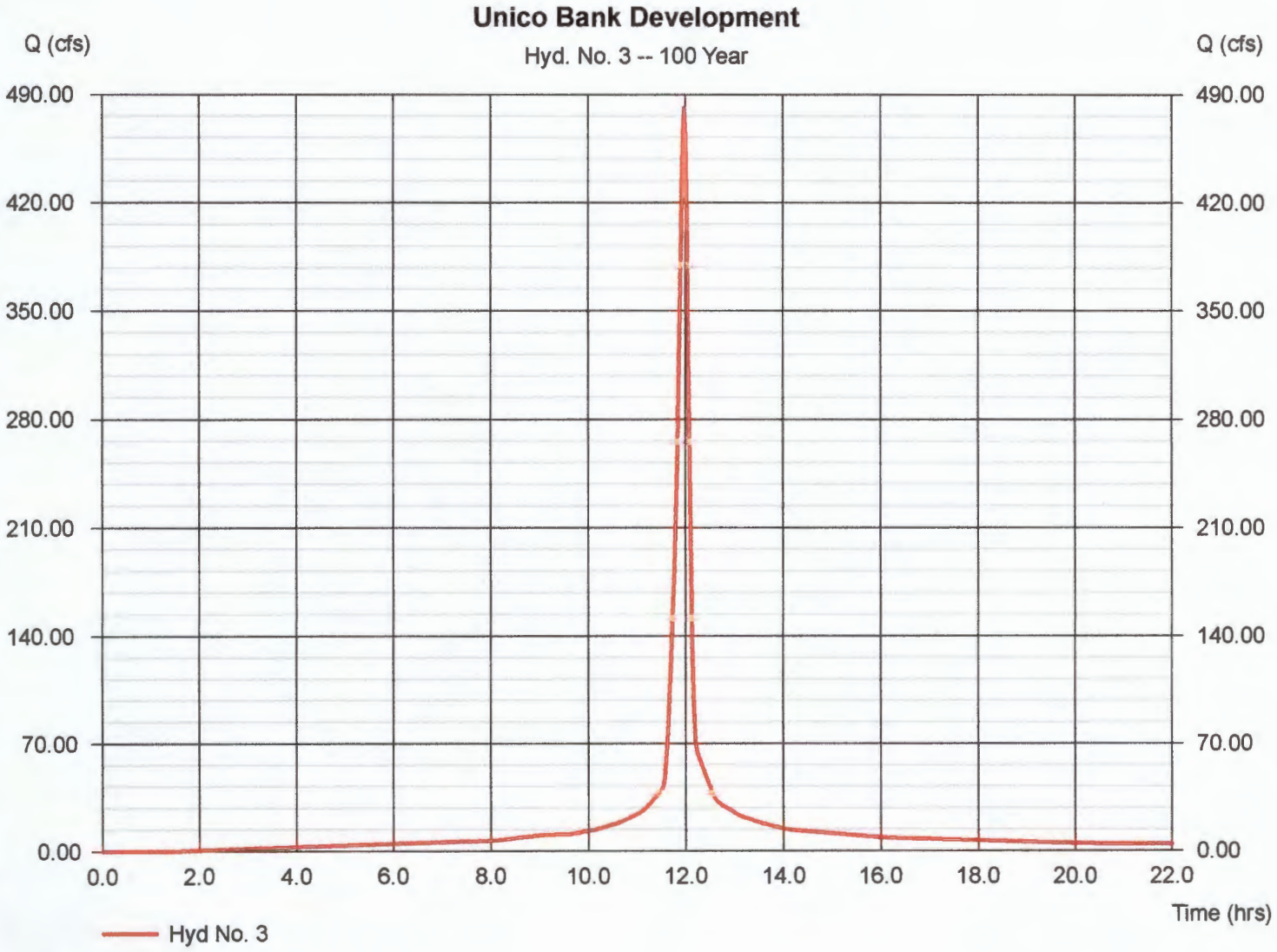
Hydrograph Report

Hyd. No. 3

Unico Bank Development

Hydrograph type	= SCS Runoff	Peak discharge	= 481.43 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.97 hrs
Time interval	= 2 min	Hyd. volume	= 1,253,015 cuft
Drainage area	= 48.600 ac	Curve number	= 95*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 9.60 min
Total precip.	= 7.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(48.600 x 95)] / 48.600



TR55 Tc Worksheet

Hyd. No. 3

Unico Bank Development

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.050		0.011		0.011		
Flow length (ft)	= 100.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 3.88		0.00		0.00		
Land slope (%)	= 2.00		0.00		0.00		
Travel Time (min)	**= 3.69**	**+**	**0.00**	**+**	**0.00**	**=**	**3.69**
Shallow Concentrated Flow							
Flow length (ft)	= 1025.00		0.00		0.00		
Watercourse slope (%)	= 2.00		0.00		0.00		
Surface description	= Paved		Paved		Paved		
Average velocity (ft/s)	= 2.87		0.00		0.00		
Travel Time (min)	**= 5.94**	**+**	**0.00**	**+**	**0.00**	**=**	**5.94**
Channel Flow							
X sectional flow area (sqft)	= 0.00		0.00		0.00		
Wetted perimeter (ft)	= 0.00		0.00		0.00		
Channel slope (%)	= 0.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	= 0.00		0.00		0.00		
Flow length (ft)	= 0.0		0.0		0.0		
Travel Time (min)	**= 0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**

Total Travel Time, Tc ..... 9.60 min

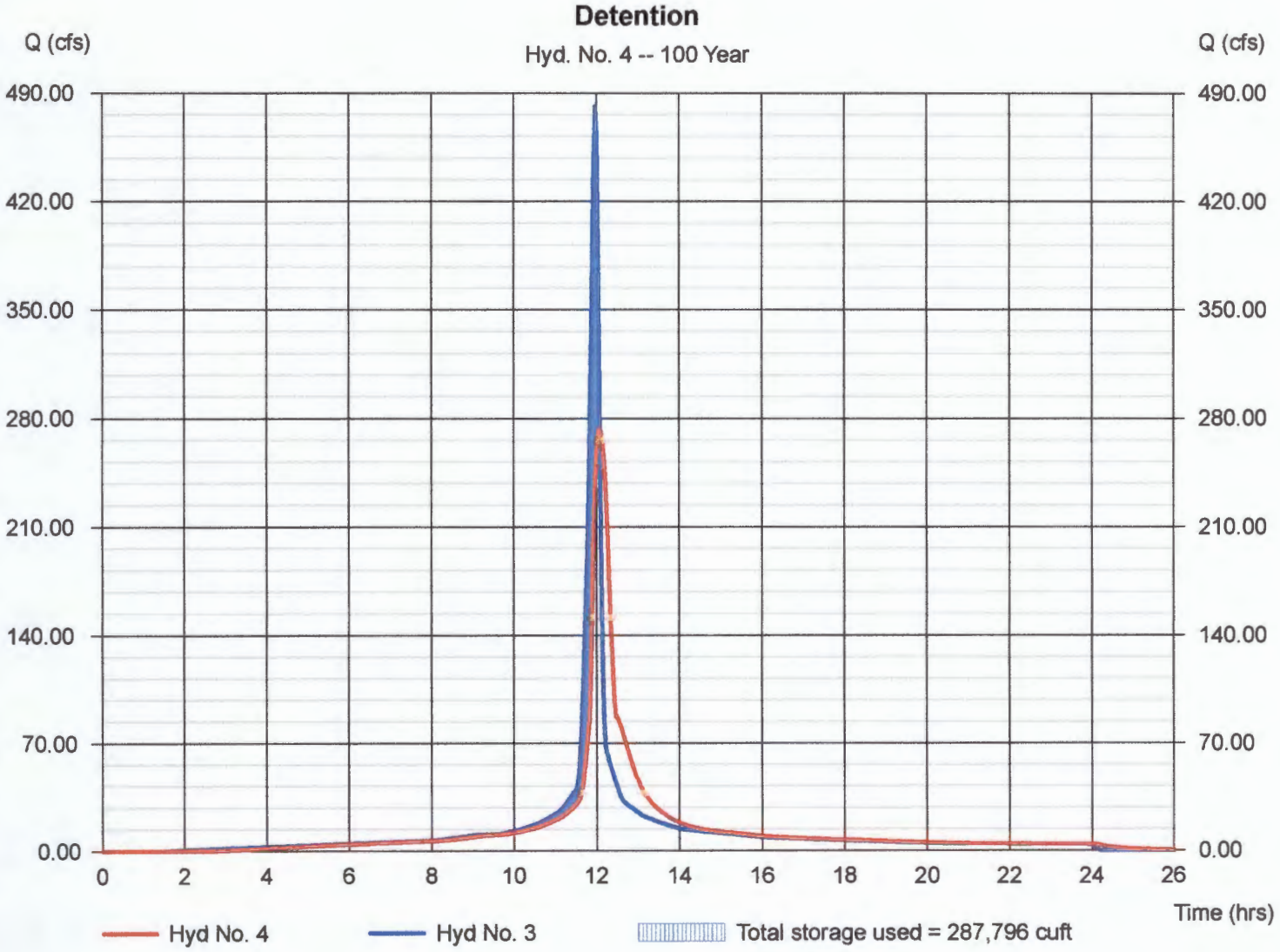
Hydrograph Report

Hyd. No. 4

Detention

Hydrograph type	= Reservoir	Peak discharge	= 272.78 cfs
Storm frequency	= 100 yrs	Time to peak	= 12.07 hrs
Time interval	= 2 min	Hyd. volume	= 1,253,000 cuft
Inflow hyd. No.	= 3 - Unico Bank Development	Max. Elevation	= 105.54 ft
Reservoir name	= Typical Detention Pond	Max. Storage	= 287,796 cuft

Storage Indication method used.



Pond Report

Pond No. 1 - Typical Detention Pond

Pond Data

Contours - User-defined contour areas. Average end area method used for volume calculation. Begining Elevation = 100.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	100.00	40,000	0	0
1.00	101.00	44,100	42,050	42,050
2.00	102.00	48,400	46,250	88,300
3.00	103.00	52,900	50,650	138,950
4.00	104.00	57,600	55,250	194,200
5.00	105.00	62,500	60,050	254,250
6.00	106.00	67,600	65,050	319,300

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 36.00	0.00	0.00	0.00
Span (in)	= 36.00	0.00	0.00	0.00
No. Barrels	= 4	0	0	0
Invert El. (ft)	= 100.00	0.00	0.00	0.00
Length (ft)	= 25.00	0.00	0.00	0.00
Slope (%)	= 1.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 0.00	0.00	0.00	0.00
Crest El. (ft)	= 0.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= —	—	—	—
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.000 (by Wet area)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	100.00	0.00	—	—	—	—	—	—	—	—	—	0.000
1.00	42,050	101.00	24.94 oc	—	—	—	—	—	—	—	—	—	24.94
2.00	88,300	102.00	62.66 oc	—	—	—	—	—	—	—	—	—	62.66
3.00	138,950	103.00	87.53 oc	—	—	—	—	—	—	—	—	—	87.53
4.00	194,200	104.00	195.72 oc	—	—	—	—	—	—	—	—	—	195.72
5.00	254,250	105.00	254.66 ic	—	—	—	—	—	—	—	—	—	254.66
6.00	319,300	106.00	288.76 ic	—	—	—	—	—	—	—	—	—	288.76

Pond Report

Hydraflow Hydrographs by Intelisolve v9.22 — Tuesday, Mar 26, 2013

Pond No. 1 - Typical Detention Pond

Pond Data

Contours - User-defined contour areas. Average end area method used for volume calculation. Begining Elevation = 100.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	100.00	40,000	0	0
1.00	101.00	44,100	42,050	42,050
2.00	102.00	48,400	46,250	88,300
3.00	103.00	52,900	50,650	138,950
4.00	104.00	57,600	55,250	194,200
5.00	105.00	62,500	60,050	254,250
6.00	106.00	67,600	65,050	319,300

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 36.00	0.00	0.00	0.00
Span (in)	= 36.00	0.00	0.00	0.00
No. Barrels	= 4	0	0	0
Invert El. (ft)	= 100.00	0.00	0.00	0.00
Length (ft)	= 25.00	0.00	0.00	0.00
Slope (%)	= 1.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

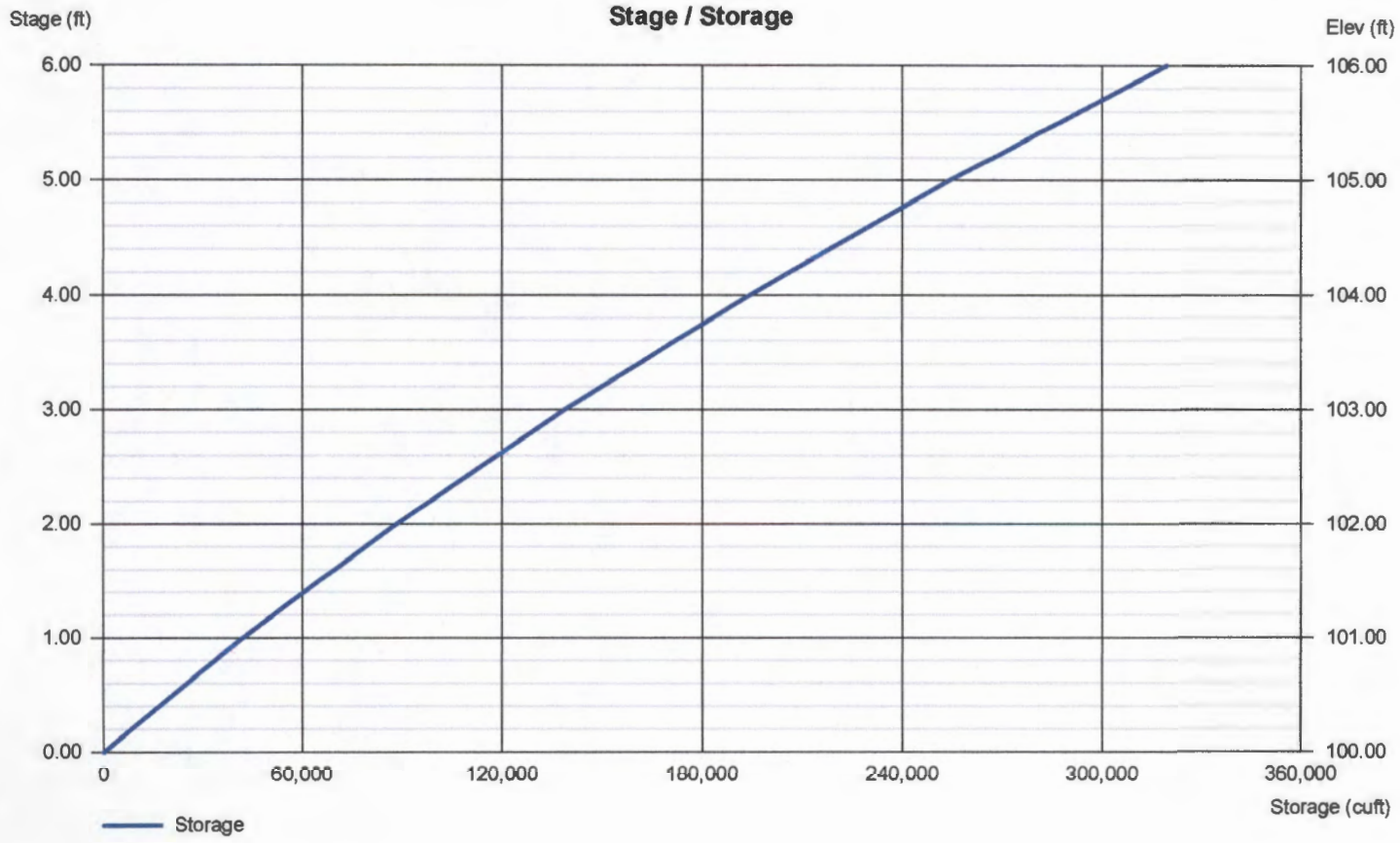
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 0.00	0.00	0.00	0.00
Crest El. (ft)	= 0.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= —	—	—	—
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.000 (by Wet area)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydraflow Rainfall Report

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	0.0000	0.0000	0.0000	———
2	54.5690	11.9000	0.7954	———
3	0.0000	0.0000	0.0000	———
5	63.9623	13.2000	0.7804	———
10	71.5409	13.9000	0.7755	———
25	83.4414	14.7000	0.7726	———
50	92.9636	15.2000	0.7715	———
100	103.0356	15.7000	0.7717	———

File name: Craighead-AR.IDF

Intensity = B / (Tc + D)^E

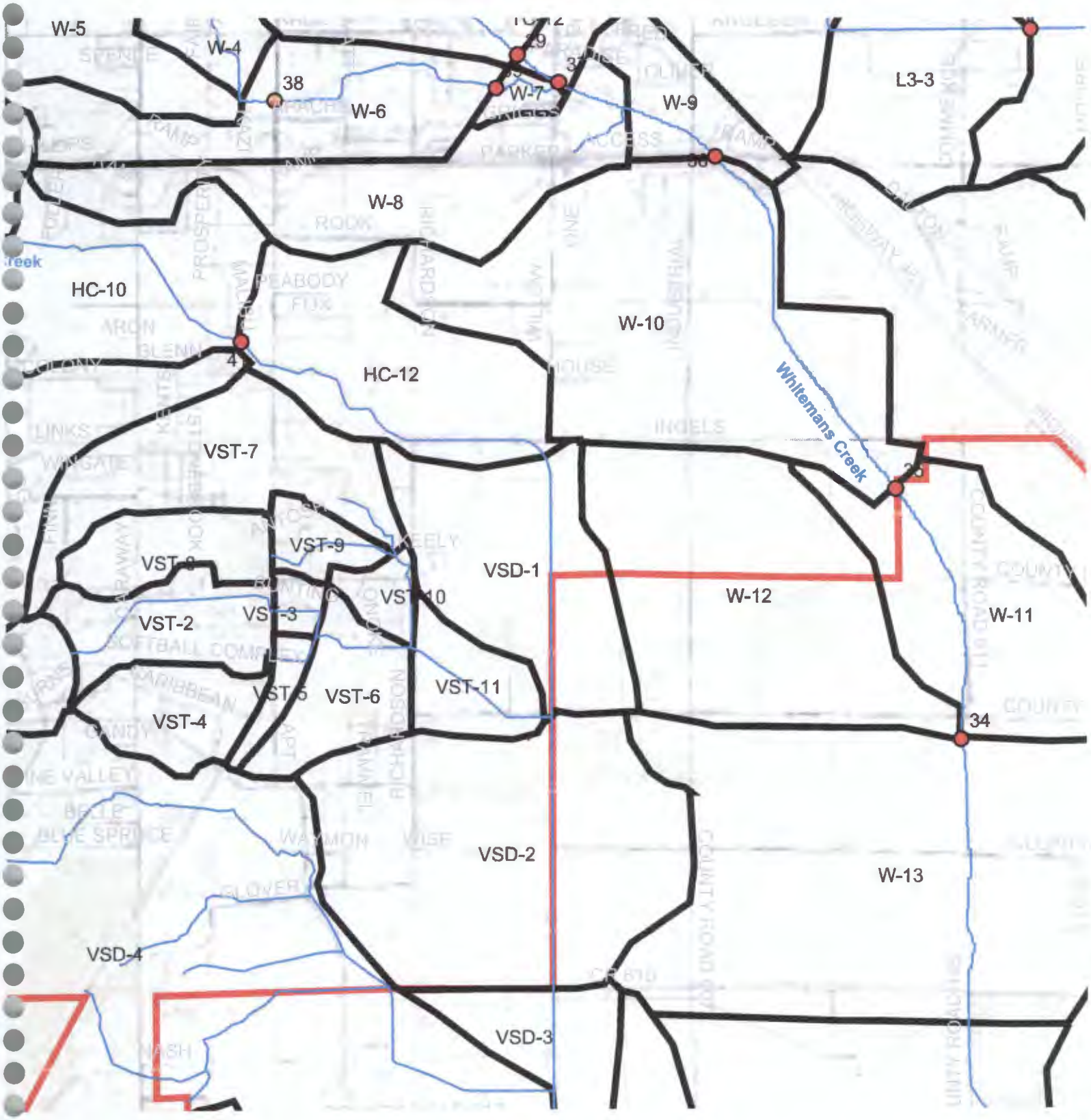
Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	5.76	4.69	3.98	3.47	3.09	2.80	2.56	2.36	2.19	2.05	1.93	1.82
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	6.65	5.50	4.72	4.16	3.73	3.38	3.11	2.88	2.68	2.52	2.37	2.24
10	7.32	6.10	5.27	4.66	4.18	3.81	3.50	3.25	3.03	2.85	2.69	2.54
25	8.34	7.00	6.07	5.39	4.85	4.43	4.08	3.79	3.54	3.33	3.14	2.98
50	9.15	7.71	6.71	5.96	5.38	4.91	4.53	4.21	3.94	3.70	3.50	3.32
100	9.94	8.41	7.33	6.53	5.90	5.40	4.98	4.63	4.33	4.08	3.85	3.65

Tc = time in minutes. Values may exceed 60.

Precip. file name: Craighead-AR.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	0.00	3.88	0.00	0.00	5.58	6.35	6.99	7.70
SCS 6-Hr	0.00	2.77	0.00	0.00	3.95	4.54	5.01	5.50
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Carter-Burgess Basin Area Map



```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             JUN  1998                 *
*          VERSION 4.1                  *
*                                       *
* RUN DATE   08APR13  TIME  20:34:54    *
*                                       *
*****************************************
```

Higginbottom Creek Viney Slough Ditch Existing Conditions

```
*****************************************
*                                       *
*   U.S. ARMY CORPS OF ENGINEERS        *
*   HYDROLOGIC ENGINEERING CENTER       *
*        609 SECOND STREET              *
*      DAVIS, CALIFORNIA 95616          *
*        (916) 756-1104                 *
*                                       *
*****************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX          XXX
```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM


```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
              *DIAGRAM
    1         ID        HIGGINBOTTOM CREEK DRAFT HYDROLOGY STUDY
    2         ID        CITY OF JONESBORO, AR PILOT STUDY BY C&B
    3         ID        FROM USACE FESIBILITY STUDY OF 1989
    4         ID        EXISTING CONDITION CN, TP, & CP FROM USGS LULC MAP
    5         ID        NEW PRECIPITATION BY SLN FROM TP-40/HYDRO 35
    6         ID        TOTAL AREA 21.67 SQ. MI., AREA REDUCTION 98%-REVISED BASIN IDENTIFIERS
    7         ID        100-YEAR MODEL          FILE: HIG100E.DAT
    8         IT      5 12FEB04    1200     288
    9         IO      5

   10         KK  HC-1          18A
   11         KM        18A PS TO HC-1
   12         BA   0.23       0
   13         PH      1       1    0.81    1.74    3.58    4.13    4.56    5.46    6.51     7.5
   14         LS   0.00   83.34    0.00
   15         US   0.31    0.54
   16         BF      1       1  1.3195

   17         KK  HC-2          17A
   18         KM        17A PS TO HC-2
   19         BA   0.26       0
   20         LS   0.00   82.85    0.00
   21         US   0.30    0.54
   22         BF      1       1  1.3195

   23         KK  C18-1
   24         KM        HC-1 & HC-2 ADDED
   25         HC      2

   26         KK  HC-3          16A
   27         KM        16A PS TO HC-3
   28         BA   0.27       0
   29         LS   0.00   86.66    0.00
   30         US   0.42    0.55
   31         BF      1       1  1.3195

   32         KK  C18-2
   33         KM        HC-3 ADDED TO C18-1
   34         HC      2

   35         KK  R17-1
   36         KM        ROUT HC-4 MILE 4.34 THRU 3.85
   37         RS      1STOR          -1       0
   38         SV             2.8    4.77    6.81    9.91   13.74   15.86   17.48   18.88   22.02
   39         SV   24.81   26.55   28.58   30.54   32.31    34.2   35.98   37.89   39.65   41.59
   40         SQ       0     117     233     349     465     581     697     813     929    1045
   41         SQ    1161    1277    1393    1509    1625    1741    1857    1973    2089    2205

   42         KK  HC-4          17B
   43         KM        17B PS TO HC-4
   44         BA   0.21       0
   45         LS   0.00   84.04    0.00
   46         US   0.25    0.53
   47         BF      1       1  1.3195
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LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   48         KK  C17-2
   49         KM        HC-4 ADDED AT MILE 3.85
   50         HC      2

   51         KK  R15-1
   52         RS      1STOR          -1       0
   53         SV       0    1.17    2.12    2.99    3.91    5.37    8.14   14.01   14.51   15.44
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 54          SV    19.1   20.17   21.47   22.63   23.79   24.65   25.58   26.75
 55          SQ       0     194     387     580     774     967    1160    1353    1547    1740
 56          SQ    1933    2513    2706    2899    3093    3286    3479    3672

 57          KK  HC-5          14A
 58          KM         14A PS TO HC-5
 59          BA    0.24       0
 60          LS    0.00   84.91    0.00
 61          US    0.42    0.55
 62          BF       1       1  1.3195

 63          KK  C17-3
 64          KM         HC-5 ADDED AT MILE 3.85
 65          HC       2

 66          KK  R15-2
 67          RS       2STOR          -1       0
 68          SV       0    4.56    7.68   10.82   14.19   17.58   22.94   34.21    46.4    62.6
 69          SV   72.22   77.53   81.56   85.07   89.06    92.2   95.81   99.14  102.54  105.57
 70          SQ       0     245     489     733     977    1221    1465    1709    1953    2197
 71          SQ    2441    2685    2929    3173    3417    3661    3905    4149    4393    4637

 72          KK  HC-6          15A
 73          KM         15A PS TO HC-6
 74          BA    0.27       0
 75          LS    0.00   79.35    0.00
 76          US    0.47    0.56
 77          BF       1       1  1.3195

 78          KK  C15-2
 79          KM         HC-6 ADDED AT MILE 2.99
 80          HC       2

 81          KK  R15-3
 82          RS       1STOR          -1       0
 83          SV       0    2.33    4.03    5.78    7.64    9.96    13.4   18.81   26.51   47.64
 84          SV   85.81     109  116.45  121.66  125.87   130.1  133.58   138.1  142.55  147.13
 85          SQ       0     245     489     733     977    1221    1465    1709    1953    2197
 86          SQ    2441    2685    2929    3173    3417    3661    3905    4149    4393    4637

 87          KK  HC-7          19A
 88          KM         19A PS TO HC-7
 89          BA    3.20       0
 90          LS    0.00   74.41    0.00
 91          US    1.40    0.61
 92          BF       1       1  1.3195
1                                           HEC-1 INPUT                                          PAGE  3

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 93          KK  C15-3
 94          KM         HC-7 ADDED AT MILE 2.99
 95          HC       2

 96          KK  HC-8          13A
 97          KM         13A PS TO HC-8
 98          BA    0.71       0
 99          LS    0.00   79.46    0.00
100          US    0.55    0.57
101          BF       1       1  1.3195

102          KK  C15-4
103          KM         HC-8 ADDED  AT  MILE 2.99
104          HC       2

105          KK  R11-1
106          KM         ROUT HC MILE 2.99 THRU 1.78
107          RS       5STOR          -1       0
108          SV       0   31.89   51.37   68.65   84.76  100.18  115.52  130.24  144.64   160.7
109          SV  187.03   222.9  251.15  289.32  330.75  379.64  415.98  465.37  511.69  552.16
110          SQ       0     392     784    1176    1568    1959    2351    2743    3135    3527
111          SQ    3918    4310    4702    5094    5486    5877    6269    6661    7053    7444

112          KK  HC-9          12A
113          KM         12A PS TO HC-9
114          BA    0.59       0
115          LS    0.00   77.51    0.00
116          US    0.85    0.59
117          BF       1       1  1.3195

118          KK  C11-2
119          KM         HC-9 ADDED  AT MILE 1.78
120          HC       2

121          KK  HC-10         11A
122          KM         11A PS TO HC-10
123          BA    0.63       0
124          LS    0.00   77.73    0.00
125          US    1.62    0.62
126          BF       1       1  1.3195

127          KK  C11-3
128          KM         HC-10  ADDED
129          HC       2

130          KK  HC-11         10A
131          KM         10A PS TO HC-11
132          BA    0.81       0
133          LS    0.00   75.14    0.00
134          US    1.10    0.60
135          BF       1       1  1.3195
1                                           HEC-1 INPUT                                          PAGE  4

LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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```
136         KK  C11-4
137         KM        HC-11 ADDED
138         HC       2

139         KK  R9-1
140         KM        ROUT HC-12   MILE 1.78 THRU 0.0
141         RL       0       0
142         RS      4STOR          -1       0
143         SV       0   34.38   56.61   76.51   96.37  114.78  137.13  166.76  212.66  269.45
144         SV  343.32   464.5  605.96  748.93  907.48 1089.37 1128.88
145         SQ       0     512    1023    1534    2045    2556    3067    3578    4089    4600
146         SQ    5112    5623    6134    6645    7156    9200    9711

147         KK  HC-12          9A
148         KM        9A PS TO HC-12
149         BA    0.58       0
150         LS    0.00   76.18    0.00
151         US    1.24    0.60
152         BF       1       1  1.3195

153         KK  C9-2
154         KM        FLOWS AT MOUTH
155         HC       2

156         KK  R9B-1 ROUTE TO VSD-1
157         RS      1STOR          -1
158         SV       1      82     230     291     342     398     481     535     655     964
159         SQ       1     900    2047    2515    3041    3637    4421    4918    6196   10000

160         KK  VSD-1          9B
161         BA    0.56       0
162         LS    0.00   77.79    0.00
163         US    1.41    0.61
164         BF       1       1  1.3195

165         KK  C9B-2 COMBINE
166         HC       2

167         KK  VST-1          9CA
168         BA    0.27       0
169         LS    0.00   72.65    0.00
170         US    0.40    0.55

171         KK  R9CA  ROUTE THROUGH VST-2
172         RS      4STOR          -1
173         SV       0    3.18    5.27    7.09    11.3    17.4   26.47   47.74   63.79   69.25
174         SV   74.55   79.61   80.88   84.93   87.76   91.87   93.88   98.77  102.34  106.68
175         SQ       0      43      86     128     171     213     256     298     341     383
176         SQ     426     468     511     553     596     638     681     723     766     808
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177         KK  VST-2          9CB
178         BA    0.25       0
179         LS    0.00   78.63    0.00
180         US    0.50    0.56

181         KK  C9C-1 COMBINE
182         HC       2

183         KK  RC9C-1ROUTE THROUGH VST-3
184         RS      2STOR          -1
185         SV       0    0.57       1    1.41    2.46    4.25    9.34   17.07    18.5   18.69
186         SV   18.85      19   19.19   19.33   19.38   19.42   20.17    20.6   21.04   21.86
187         SQ       0      84     168     252     336     420     504     588     672     756
188         SQ     840     924    1008    1092    1176    1260    1344    1428    1512    1596

189         KK  VST-3          9CC
190         BA    0.04       0
191         LS    0.00   77.39    0.00
192         US    0.27    0.54

193         KK  C9C-2 COMBINE
194         HC       2

195         KK  VST-4          9CJ
196         BA    0.20       0
197         LS    0.00   75.80    0.00
198         US    0.35    0.55

199         KK  R9CJ  ROUTE THROUGH VST-5
200         RS      1STOR          -1
201         SV       0    0.15    1.54    2.86     4.3    5.67    8.11    9.54    9.98   10.32
202         SV   10.61   10.84    11.1   11.35   11.54    12.3   12.68   13.04   13.61
203         SQ       0      44      87     130     173     217     303     346     389     433
204         SQ     476     519     562     605     649     692     735     778     821

205         KK  VST-5          9CK
206         BA    0.05       0
207         LS    0.00   75.69    0.00
208         US    0.25    0.53

209         KK  C9C-3 COMBINE
210         HC       2

211         KK  C9C-4 COMBINE
212         HC       2

213         KK  RC9C-4ROUTE THROUGH VST-6
214         RS      2STOR          -1
215         SV       0       2    3.42   10.77   18.89   29.62    49.1   57.03   62.21   65.78
```

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 216          SV   70.26   74.58   77.68   82.56   87.07   91.28   94.99   96.74   98.46
 217          SQ       0     144     287     430     573     716     859    1002    1145    1288
 218          SQ    1432    1718    1861    2004    2147    2290    2433    2576    2719
1                                          HEC-1 INPUT                                    PAGE  6

 LINE         ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

 219          KK  VST-6         9CD
 220          BA    0.22       0
 221          LS    0.00   75.93    0.00
 222          US    0.77    0.58

 223          KK  C9C-5 COMBINE
 224          HC       2

 225          KK  VST-7         9CF
 226          BA    0.49       0
 227          LS    0.00   78.29    0.00
 228          US    1.21    0.60

 229          KK  VST-8         9CG
 230          BA    0.19       0
 231          LS    0.00   75.09    0.00
 232          US    0.68    0.58

 233          KK  R9CG  ROUTE THROUGH VST-9
 234          RS       4STOR          -1
 235          SV       0     1.1     2.08    3.98    7.64     9.3   11.99   23.43   42.56    51.1
 236          SV   51.43   51.63   51.76   52.54   53.16   54.29   55.61   56.67   61.06
 237          SQ       0      27      54      81     108     135     162     189     216     243
 238          SQ     269     296     323     350     377     404     431     458     511

 239          KK  VST-9         9CH
 240          BA    0.09       0
 241          LS    0.00   77.45    0.00
 242          US    0.59    0.57

 243          KK  C9C-5aCOMBINE
 244          HC       2

 245          KK  C9C-5bCOMBINE
 246          HC       2

 247          KK  RC9C-5ROUTE THROUGH VST-10
 248          RS       3STOR          -1
 249          SV       0    2.27   14.41   27.93   44.18   57.46   70.66    82.2   93.84  101.89
 250          SV  106.27  109.94  115.25  118.97   119.3  122.23  125.31  136.13  143.49
 251          SQ       0      94     187     280     374     467     560     654     747     840
 252          SQ     934    1027    1120    1214    1307    1400    1494    1587    1680

 253          KK  VST-10        9CI
 254          BA    0.07       0
 255          LS    0.00   79.30    0.00
 256          US    0.44    0.56

 257          KK  C9C-6 COMBINE
 258          HC       2
1                                          HEC-1 INPUT                                    PAGE  7

 LINE         ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

 259          KK  C9C-7 COMBINE
 260          HC       2

 261          KK  RC9C-7ROUTE THROUGH VST-11
 262          RS       4STOR          -1
 263          SV       0     8.6    17.7   37.52   65.98   80.65   101.2  106.86  124.27  141.15
 264          SV  156.01  170.24  187.64  194.88  204.65  217.45  229.19   246.7  259.89
 265          SQ       0     260     519     778    1037    1296    1555    1814    2073    2332
 266          SQ    2591    2850    3109    3368    3627    3886    4404    4663    4922

 267          KK  VST-11        9CE
 268          BA    0.17       0
 269          LS    0.00   77.69    0.00
 270          US    0.63    0.57

 271          KK  C9C-8 COMBINE
 272          HC       2

 273          KK  C9B-3 COMBINE
 274          HC       2

 275          KK  R9D-1 ROUTE TO VSD-2
 276          RS       6STOR          -1
 277          SV       1     183     506     599     696     800     932    1011    1212    1770
 278          SQ       1    1000    2520    3095    3744    4478    5442    6054    7624   12000

 279          KK  VSD-2         9D
 280          BA    1.14       0
 281          LS    0.00   77.00    0.00
 282          US    1.80    0.62

 283          KK  C9D-2 COMBINE
 284          HC       2

 285          KK  R9E-1 ROUTE TO VSD-3
 286          RS       5STOR          -1
 287          SV       1     250     664     740     818     902    1015    1079    1246    1698
 288          SQ       1    1100    2884    3543    4285    5125    6229    6929    8726   14000

 289          KK  VSD-3         9E
 290          BA    0.31       0
 291          LS    0.00   78.14    0.00
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           292          US    1.36    0.61

           293          KK  C9F-1 COMBINE
           294          HC       2

           295          KK  VSD-4          9F
           296          BA    2.78        0
           297          LS    0.00   74.65    0.00
           298          US    2.06    0.63
1                                          HEC-1 INPUT                                      PAGE  8

          LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


           299          KK  C9F-2 COMBINE
           300          HC       2

           301          KK  R9G-1 ROUTE TO VSD-5
           302          RS      4STOR           -1
           303          SV       1     261     574     664     753     849     963    1033    1200    1625
           304          SQ       1    1200    3269    4015    4856    5808    7059    7853    9889   16000

           305          KK  VSD-5          9G
           306          BA    1.23        0
           307          LS    0.00   74.05    0.00
           308          US    1.46    0.61

           309          KK  C9H-1 COMBINE
           310          HC       2

           311          KK  R9H-2 ROUTE TO VSD-6
           312          RS       3STOR          -1
           313          SV       1     389     887    1019    1161    1310    1495    1606    1879    2541
           314          SQ       1    1300    3763    4622    5590    6686    8127    9040   11384   18000

           315          KK  VSD-6          9H
           316          BA    2.99        0
           317          LS    0.00   75.61    0.00
           318          US    3.42    0.66

           319          KK  C9H-3 COMBINE
           320          HC       2

           321          KK  R9I-1 ROUTE TO VSD-7
           322          RS       2STOR          -1
           323          SV       1     668    1598    1845    2099    2375    2709    2906    3398    4488
           324          SQ       1    1400    4313    5298    6407    7664    9315   10362   13049   20000

           325          KK  VSD-7          9I
           326          BA    2.63        0
           327          LS    0.00   74.94    0.00
           328          US    0.90    0.59

           329          KK  C9I-2 COMBINE
           330          HC       2
           331          ZZ
1
                  SCHEMATIC DIAGRAM OF STREAM NETWORK
 INPUT
  LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

   NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   10      HC-1
               .
               .
   17          .      HC-2
               .          .
               .          .
   23      C18-1 ............
               .
               .
   26          .      HC-3
               .          .
               .          .
   32      C18-2 ............
               V
               V
   35      R17-1
               .
               .
   42          .      HC-4
               .          .
               .          .
   48      C17-2 ............
               V
               V
   51      R15-1
               .
               .
   57          .      HC-5
               .          .
               .          .
   63      C17-3 ............
               V
               V
   66      R15-2
               .
               .
   72          .      HC-6
               .          .
               .          .
   78      C15-2 ............
               V
               V
```
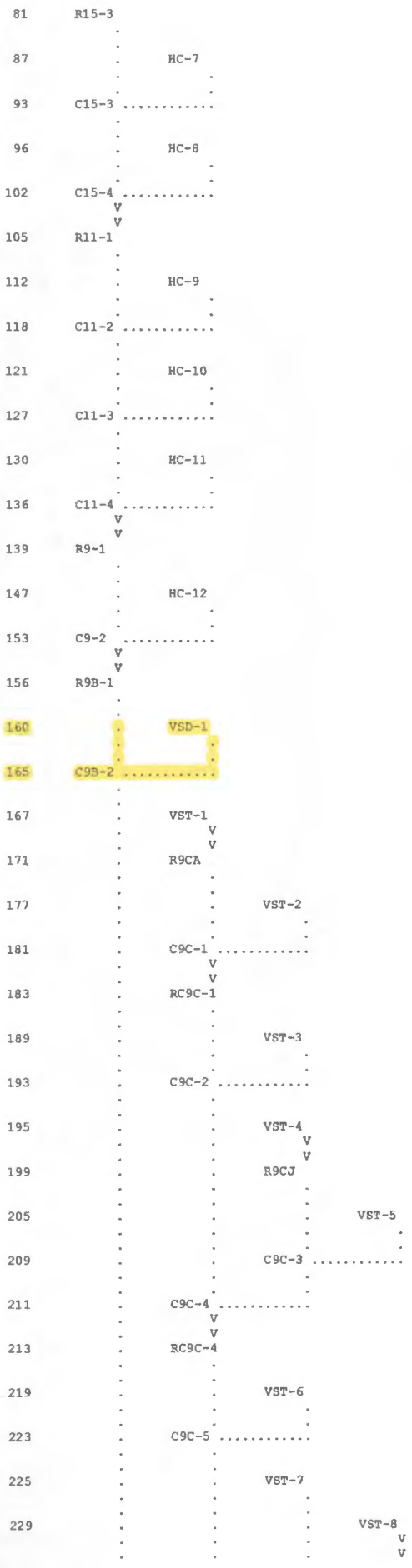
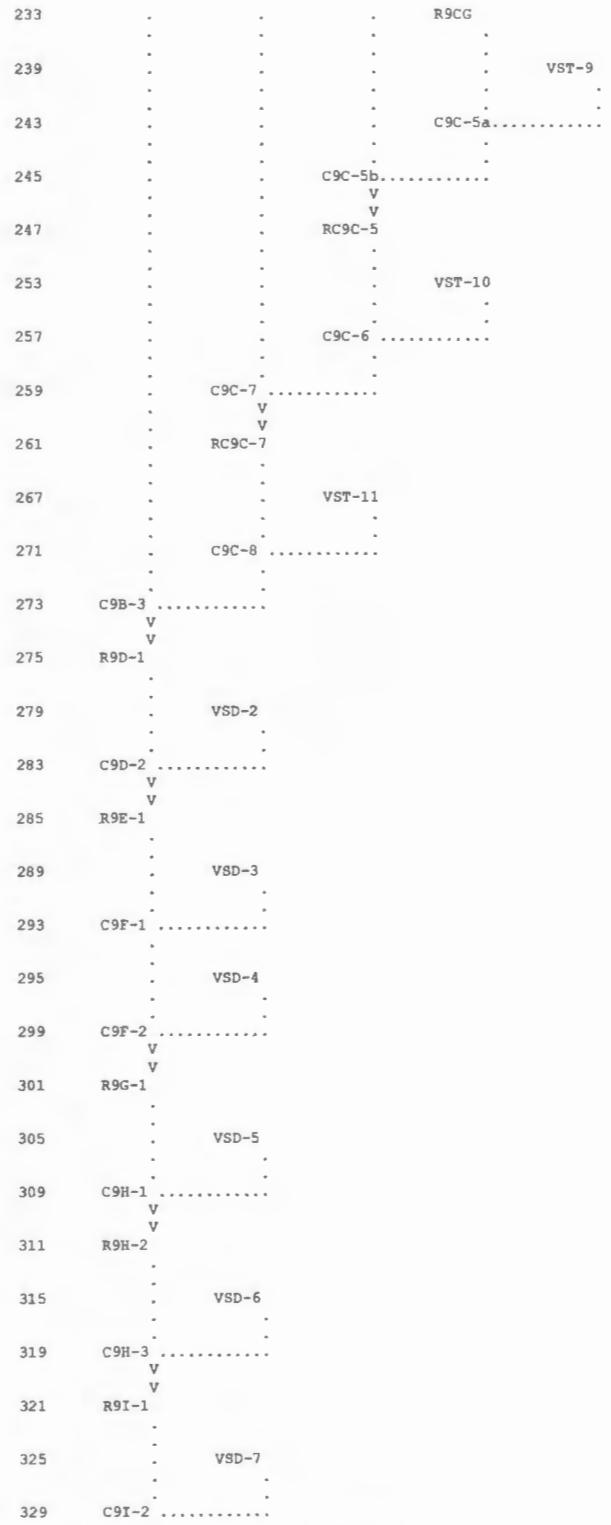


81 R15-3
87 HC-7
93 C15-3
96 HC-8
102 C15-4
105 R11-1
112 HC-9
118 C11-2
121 HC-10
127 C11-3
130 HC-11
136 C11-4
139 R9-1
147 HC-12
153 C9-2
156 R9B-1
160 VSD-1
165 C9B-2
167 VST-1
171 R9CA
177 VST-2
181 C9C-1
183 RC9C-1
189 VST-3
193 C9C-2
195 VST-4
199 R9CJ
205 VST-5
209 C9C-3
211 C9C-4
213 RC9C-4
219 VST-6
223 C9C-5
225 VST-7
229 VST-8



(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

1**********

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*                                      *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)  *
*              JUN  1998               *
*            VERSION 4.1               *
*                                      *
*  RUN DATE   08APR13  TIME  20:34:54  *
*                                      *
**************************************
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```
**************************************
*                                    *
*    U.S. ARMY CORPS OF ENGINEERS    *
*    HYDROLOGIC ENGINEERING CENTER   *
*         609 SECOND STREET          *
*       DAVIS, CALIFORNIA 95616      *
*           (916) 756-1104           *
*                                    *
**************************************
```

HIGGINBOTTOM CREEK DRAFT HYDROLOGY STUDY
CITY OF JONESBORO, AR PILOT STUDY BY C&B
FROM USACE FESIBILITY STUDY OF 1989
EXISTING CONDITION CN, TP, & CP FROM USGS LULC MAP

NEW PRECIPITATION BY SLN FROM TP-40/HYDRO 35
TOTAL AREA 21.67 SQ. MI., AREA REDUCTION 98%-REVISED BASIN IDENTIFIERS
100-YEAR MODEL FILE: HIG100E.DAT

9 IO OUTPUT CONTROL VARIABLES

IPRNT	5	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA

NMIN	5	MINUTES IN COMPUTATION INTERVAL
IDATE	12FEB 4	STARTING DATE
ITIME	1200	STARTING TIME
NQ	288	NUMBER OF HYDROGRAPH ORDINATES
NDDATE	13FEB 4	ENDING DATE
NDTIME	1155	ENDING TIME
ICENT	19	CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
TOTAL TIME BASE 23.92 HOURS

ENGLISH UNITS

DRAINAGE AREA	SQUARE MILES
PRECIPITATION DEPTH	INCHES
LENGTH, ELEVATION	FEET
FLOW	CUBIC FEET PER SECOND
STORAGE VOLUME	ACRE-FEET
SURFACE AREA	ACRES
TEMPERATURE	DEGREES FAHRENHEIT

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	HC-1	512.	12.33	110.	34.	34.	.23		
+	HYDROGRAPH AT	HC-2	581.	12.25	123.	38.	38.	.26		
+	2 COMBINED AT	C18-1	1091.	12.25	234.	72.	72.	.49		
+	HYDROGRAPH AT	HC-3	561.	12.42	137.	43.	43.	.27		
+	2 COMBINED AT	C18-2	1635.	12.33	370.	115.	115.	.76		
+	ROUTED TO	R17-1	1384.	12.58	370.	115.	115.	.76		
+	HYDROGRAPH AT	HC-4	538.	12.25	102.	32.	32.	.21		
+	2 COMBINED AT	C17-2	1773.	12.50	472.	146.	146.	.97		
+	ROUTED TO	R15-1	1738.	12.58	472.	146.	146.	.97		
+	HYDROGRAPH AT	HC-5	485.	12.42	118.	37.	37.	.24		
+	2 COMBINED AT	C17-3	2176.	12.58	590.	183.	183.	1.21		
+	ROUTED TO	R15-2	1775.	13.00	589.	182.	182.	1.21		
+	HYDROGRAPH AT	HC-6	454.	12.50	120.	37.	37.	.27		
+	2 COMBINED AT	C15-2	2074.	12.83	709.	219.	219.	1.48		
+	ROUTED TO	R15-3	1955.	13.17	709.	219.	219.	1.48		
+	HYDROGRAPH AT	HC-7	2480.	13.33	1228.	377.	377.	3.20		
+	2 COMBINED AT	C15-3	4419.	13.33	1925.	595.	595.	4.68		
+	HYDROGRAPH AT	HC-8	1103.	12.58	315.	96.	96.	.71		
+	2 COMBINED AT	C15-4	4994.	13.17	2237.	691.	691.	5.39		
+	ROUTED TO	R11-1	4621.	14.00	2229.	682.	682.	5.39		
+	HYDROGRAPH AT	HC-9	688.	12.83	250.	76.	76.	.59		
+	2 COMBINED AT	C11-2	4937.	14.00	2471.	757.	757.	5.98		
	HYDROGRAPH AT									

+		HC-10	479.	13.58	256.	80.	80.	.63
+	2 COMBINED AT	C11-3	5370.	13.92	2728.	838.	838.	6.61
+	HYDROGRAPH AT	HC-11	748.	13.08	322.	98.	98.	.81
+	2 COMBINED AT	C11-4	5868.	13.92	3048.	935.	935.	7.42
+	ROUTED TO	R9-1	5106.	15.25	3035.	924.	924.	7.42
+	HYDROGRAPH AT	HC-12	503.	13.17	234.	72.	72.	.58
+	2 COMBINED AT	C9-2	5307.	15.17	3260.	995.	995.	8.00
+	ROUTED TO	R9B-1	4533.	15.83	3014.	974.	974.	8.00
+	HYDROGRAPH AT	VSD-1	464.	13.33	232.	72.	72.	.56
+	2 COMBINED AT	C9B-2	4700.	15.83	3205.	1046.	1046.	8.56
+	HYDROGRAPH AT	VST-1	424.	12.42	103.	31.	31.	.27
+	ROUTED TO	R9CA	221.	14.08	103.	31.	31.	.27
+	HYDROGRAPH AT	VST-2	407.	12.50	109.	33.	33.	.25
+	2 COMBINED AT	C9C-1	530.	12.58	211.	64.	64.	.52
+	ROUTED TO	RC9C-1	458.	13.08	211.	64.	64.	.52
+	HYDROGRAPH AT	VST-3	86.	12.25	17.	5.	5.	.04
+	2 COMBINED AT	C9C-2	483.	12.92	228.	69.	69.	.56
+	HYDROGRAPH AT	VST-4	365.	12.33	82.	25.	25.	.20
+	ROUTED TO	R9CJ	276.	12.67	82.	25.	25.	.20
+	HYDROGRAPH AT	VST-5	108.	12.25	21.	6.	6.	.05
+	2 COMBINED AT	C9C-3	343.	12.58	103.	31.	31.	.25
+	2 COMBINED AT	C9C-4	822.	12.58	330.	101.	101.	.81
+	ROUTED TO	RC9C-4	672.	13.50	330.	101.	101.	.81
+	HYDROGRAPH AT	VST-6	260.	12.75	90.	27.	27.	.22
+	2 COMBINED AT	C9C-5	852.	13.17	420.	128.	128.	1.03
+	HYDROGRAPH AT	VST-7	458.	13.17	208.	64.	64.	.49
+	HYDROGRAPH AT	VST-8	239.	12.67	77.	23.	23.	.19
+	ROUTED TO	R9CG	160.	14.17	76.	23.	23.	.19
+	HYDROGRAPH AT	VST-9	130.	12.58	38.	12.	12.	.09
+	2 COMBINED AT	C9C-5a	202.	13.33	114.	35.	35.	.28
+	2 COMBINED AT	C9C-5b	652.	13.25	322.	99.	99.	.77
+	ROUTED TO	RC9C-5	471.	15.08	316.	98.	98.	.77
+	HYDROGRAPH AT	VST-10	123.	12.42	31.	10.	10.	.07
+	2 COMBINED AT	C9C-6	484.	15.00	339.	108.	108.	.84
+	2 COMBINED AT	C9C-7	1132.	13.67	755.	236.	236.	1.87
	ROUTED TO							

+		RC9C-7	1088.	14.67	753.	235.	235.	1.87
+	HYDROGRAPH AT	VST-11	234.	12.58	73.	22.	22.	.17
+	2 COMBINED AT	C9C-8	1137.	14.58	821.	257.	257.	2.04
+	2 COMBINED AT	C9B-3	5712.	15.75	3972.	1303.	1303.	10.60
+	ROUTED TO	R9D-1	5313.	17.17	3784.	1232.	1232.	10.60
+	HYDROGRAPH AT	VSD-2	786.	13.75	448.	142.	142.	1.14
+	2 COMBINED AT	C9D-2	5566.	17.17	4010.	1373.	1373.	11.74
+	ROUTED TO	R9E-1	5263.	18.50	3789.	1173.	1173.	11.74
+	HYDROGRAPH AT	VSD-3	267.	13.33	130.	40.	40.	.31
+	2 COMBINED AT	C9F-1	5300.	18.50	3816.	1213.	1213.	12.05
+	HYDROGRAPH AT	VSD-4	1643.	14.00	1008.	324.	324.	2.78
+	2 COMBINED AT	C9F-2	5763.	18.42	4157.	1536.	1536.	14.83
+	ROUTED TO	R9G-1	5301.	19.83	4037.	1285.	1285.	14.83
+	HYDROGRAPH AT	VSD-5	911.	13.42	465.	143.	143.	1.23
+	2 COMBINED AT	C9H-1	5404.	19.83	4128.	1428.	1428.	16.06
+	ROUTED TO	R9H-2	4601.	22.00	3429.	998.	998.	16.06
+	HYDROGRAPH AT	VSD-6	1275.	15.42	960.	336.	336.	2.99
+	2 COMBINED AT	C9H-3	4950.	21.92	3891.	1335.	1335.	19.05
+	ROUTED TO	R9I-1	3572.	23.92	2045.	598.	598.	19.05
+	HYDROGRAPH AT	VSD-7	2747.	12.92	1050.	317.	317.	2.63
+	2 COMBINED AT	C9I-2	3679.	23.92	2201.	915.	915.	21.68

*** NORMAL END OF HEC-1 ***

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1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             JUN  1998                 *
*           VERSION 4.1                 *
*                                       *
*  RUN DATE   08APR13  TIME  20:38:24   *
*                                       *
*****************************************
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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*          609 SECOND STREET            *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
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X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X                X
XXXXXXX  XXXX     X        XXXXX   X
X     X  X        X                X
X     X  X        X     X          X
X     X  XXXXXXX   XXXXX           XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM


```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

              *DIAGRAM
    1         ID        HIGGINBOTTOM CREEK DRAFT HYDROLOGY STUDY
    2         ID        CITY OF JONESBORO, AR PILOT STUDY BY C&B
    3         ID        FROM USACE FESIBILITY STUDY OF 1989
    4         ID        EXISTING CONDITION CN, TP, & CP FROM USGS LULC MAP
    5         ID        NEW PRECIPITATION BY SLN FROM TP-40/HYDRO 35
    6         ID        TOTAL AREA 21.67 SQ. MI., AREA REDUCTION 98%-REVISED BASIN IDENTIFIERS
    7         ID        100-YEAR MODEL          FILE: HIG100E.DAT
    8         IT       5 12FEB04    1200     288
    9         IO       5

   10         KK  HC-1          18A
   11         KM        18A PS TO HC-1
   12         BA    0.23        0
   13         PH       1        1    0.81    1.74    3.58    4.13    4.56    5.46    6.51     7.5
   14         LS    0.00   83.34    0.00
   15         US    0.31    0.54
   16         BF       1        1  1.3195

   17         KK  HC-2          17A
   18         KM        17A PS TO HC-2
   19         BA    0.26        0
   20         LS    0.00   82.85    0.00
   21         US    0.30    0.54
   22         BF       1        1  1.3195

   23         KK  C18-1
   24         KM        HC-1 & HC-2 ADDED
   25         HC       2

   26         KK  HC-3          16A
   27         KM        16A PS TO HC-3
   28         BA    0.27        0
   29         LS    0.00   86.66    0.00
   30         US    0.42    0.55
   31         BF       1        1  1.3195

   32         KK  C18-2
   33         KM        HC-3 ADDED TO C18-1
   34         HC       2

   35         KK  R17-1
   36         KM        ROUT HC-4 MILE 4.34 THRU 3.85
   37         RS       1STOR          -1       0
   38         SV             2.8    4.77    6.81    9.91   13.74   15.86   17.48   18.88   22.02
   39         SV   24.81   26.55   28.58   30.54   32.31    34.2   35.98   37.89   39.65   41.59
   40         SQ       0     117     233     349     465     581     697     813     929    1045
   41         SQ    1161    1277    1393    1509    1625    1741    1857    1973    2089    2205

   42         KK  HC-4          17B
   43         KM        17B PS TO HC-4
   44         BA    0.21        0
   45         LS    0.00   84.04    0.00
   46         US    0.25    0.53
   47         BF       1        1  1.3195
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LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10


   48         KK  C17-2
   49         KM        HC-4 ADDED AT MILE 3.85
   50         HC       2

   51         KK  R15-1
   52         RS       1STOR          -1       0
   53         SV       0    1.17    2.12    2.99    3.91    5.37    8.14   14.01   14.51   15.44
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   54          SV    19.1   20.17   21.47   22.63   23.79   24.65   25.58   26.75
   55          SQ       0     194     387     580     774     967    1160    1353    1547    1740
   56          SQ    1933    2513    2706    2899    3093    3286    3479    3672

   57          KK  HC-5           14A
   58          KM          14A PS TO HC-5
   59          BA    0.24       0
   60          LS    0.00   84.91    0.00
   61          US    0.42    0.55
   62          BF       1       1  1.3195

   63          KK  C17-3
   64          KM          HC-5 ADDED AT MILE 3.85
   65          HC       2

   66          KK  R15-2
   67          RS       2STOR             -1       0
   68          SV       0    4.56    7.68   10.82   14.19   17.58   22.94   34.21    46.4    62.6
   69          SV   72.22   77.53   81.56   85.07   89.06    92.2   95.81   99.14  102.54  105.57
   70          SQ       0     245     489     733     977    1221    1465    1709    1953    2197
   71          SQ    2441    2685    2929    3173    3417    3661    3905    4149    4393    4637

   72          KK  HC-6           15A
   73          KM          15A PS TO HC-6
   74          BA    0.27       0
   75          LS    0.00   79.35    0.00
   76          US    0.47    0.56
   77          BF       1       1  1.3195

   78          KK  C15-2
   79          KM          HC-6 ADDED AT MILE 2.99
   80          HC       2

   81          KK  R15-3
   82          RS       1STOR             -1       0
   83          SV       0    2.33    4.03    5.78    7.64    9.96    13.4   18.81   26.51   47.64
   84          SV   85.81     109  116.45  121.66  125.87   130.1  133.58   138.1  142.55  147.13
   85          SQ       0     245     489     733     977    1221    1465    1709    1953    2197
   86          SQ    2441    2685    2929    3173    3417    3661    3905    4149    4393    4637

   87          KK  HC-7           19A
   88          KM          19A PS TO HC-7
   89          BA    3.20       0
   90          LS    0.00   74.41    0.00
   91          US    1.40    0.61
   92          BF       1       1  1.3195
1                                        HEC-1 INPUT                                          PAGE  3

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


   93          KK  C15-3
   94          KM          HC-7 ADDED AT MILE 2.99
   95          HC       2

   96          KK  HC-8           13A
   97          KM          13A PS TO HC-8
   98          BA    0.71       0
   99          LS    0.00   79.46    0.00
  100          US    0.55    0.57
  101          BF       1       1  1.3195

  102          KK  C15-4
  103          KM          HC-8 ADDED  AT  MILE 2.99
  104          HC       2

  105          KK  R11-1
  106          KM          ROUT HC MILE 2.99 THRU 1.78
  107          RS       5STOR             -1       0
  108          SV       0   31.89   51.37   68.65   84.76  100.18  115.52  130.24  144.64   160.7
  109          SV  187.03   222.9  251.15  289.32  330.75  379.64  415.98  465.37  511.69  552.16
  110          SQ       0     392     784    1176    1568    1959    2351    2743    3135    3527
  111          SQ    3918    4310    4702    5094    5486    5877    6269    6661    7053    7444

  112          KK  HC-9           12A
  113          KM          12A PS TO HC-9
  114          BA    0.59       0
  115          LS    0.00   77.51    0.00
  116          US    0.85    0.59
  117          BF       1       1  1.3195

  118          KK  C11-2
  119          KM          HC-9 ADDED  AT MILE 1.78
  120          HC       2

  121          KK  HC-10          11A
  122          KM          11A PS TO HC-10
  123          BA    0.63       0
  124          LS    0.00   77.73    0.00
  125          US    1.62    0.62
  126          BF       1       1  1.3195

  127          KK  C11-3
  128          KM          HC-10  ADDED
  129          HC       2

  130          KK  HC-11          10A
  131          KM          10A PS TO HC-11
  132          BA    0.81       0
  133          LS    0.00   75.14    0.00
  134          US    1.10    0.60
  135          BF       1       1  1.3195
1                                        HEC-1 INPUT                                          PAGE  4

 LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10
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136          KK  C11-4
137          KM        HC-11 ADDED
138          HC       2

139          KK  R9-1
140          KM        ROUT HC-12   MILE 1.78 THRU 0.0
141          RL       0       0
142          RS       4STOR          -1       0
143          SV       0   34.38   56.61   76.51   96.37  114.78  137.13  166.76  212.66  269.45
144          SV  343.32   464.5  605.96  748.93  907.48 1089.37 1128.88
145          SQ       0     512    1023    1534    2045    2556    3067    3578    4089    4600
146          SQ    5112    5623    6134    6645    7156    9200    9711

147          KK  HC-12          9A
148          KM        9A PS TO HC-12
149          BA    0.58       0
150          LS    0.00   76.18    0.00
151          US    1.24    0.60
152          BF       1       1  1.3195

153          KK  C9-2
154          KM        FLOWS AT MOUTH
155          HC       2

156          KK  R9B-1 ROUTE TO VSD-1
157          RS       1STOR          -1
158          SV       1      82     230     291     342     398     481     535     655     964
159          SQ       1     900    2047    2515    3041    3637    4421    4918    6196   10000

160          KK   VSD-1         9B
161          BA    0.48       0
162          LS       0   77.79       0
163          US    1.41    0.61
164          BF       1       1  1.3195

165          KK  VSD-1A         9C
166          BA    0.08       0
167          LS       0      95       0
168          US     0.1    0.55
169          BF       1       1  1.3195

170          KK  C9B-9C COMBINE
171          HC       2

172          KK   C9B-2 COMBINE
173          HC       2

174          KK  VST-1          9CA
175          BA    0.27       0
176          LS    0.00   72.65    0.00
177          US    0.40    0.55
1                                       HEC-1 INPUT                                          PAGE  5

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


178          KK  R9CA  ROUTE THROUGH VST-2
179          RS       4STOR          -1
180          SV       0    3.18    5.27    7.09    11.3    17.4   26.47   47.74   63.79   69.25
181          SV   74.55   79.61   80.88   84.93   87.76   91.87   93.88   98.77  102.34  106.68
182          SQ       0      43      86     128     171     213     256     298     341     383
183          SQ     426     468     511     553     596     638     681     723     766     808

184          KK  VST-2          9CB
185          BA    0.25       0
186          LS    0.00   78.63    0.00
187          US    0.50    0.56

188          KK  C9C-1 COMBINE
189          HC       2

190          KK  RC9C-1ROUTE THROUGH VST-3
191          RS       2STOR          -1
192          SV       0    0.57       1    1.41    2.46    4.25    9.34   17.07    18.5   18.69
193          SV   18.85      19   19.19   19.33   19.38   19.42   20.17    20.6   21.04   21.86
194          SQ       0      84     168     252     336     420     504     588     672     756
195          SQ     840     924    1008    1092    1176    1260    1344    1428    1512    1596

196          KK  VST-3          9CC
197          BA    0.04       0
198          LS    0.00   77.39    0.00
199          US    0.27    0.54

200          KK  C9C-2 COMBINE
201          HC       2

202          KK  VST-4          9CJ
203          BA    0.20       0
204          LS    0.00   75.80    0.00
205          US    0.35    0.55

206          KK  R9CJ  ROUTE THROUGH VST-5
207          RS       1STOR          -1
208          SV       0    0.15    1.54    2.86     4.3    5.67    8.11    9.54    9.98   10.32
209          SV   10.61   10.84    11.1   11.35   11.54    12.3   12.68   13.04   13.61
210          SQ       0      44      87     130     173     217     303     346     389     433
211          SQ     476     519     562     605     649     692     735     778     821

212          KK  VST-5          9CK
213          BA    0.05       0
214          LS    0.00   75.69    0.00
215          US    0.25    0.53
```
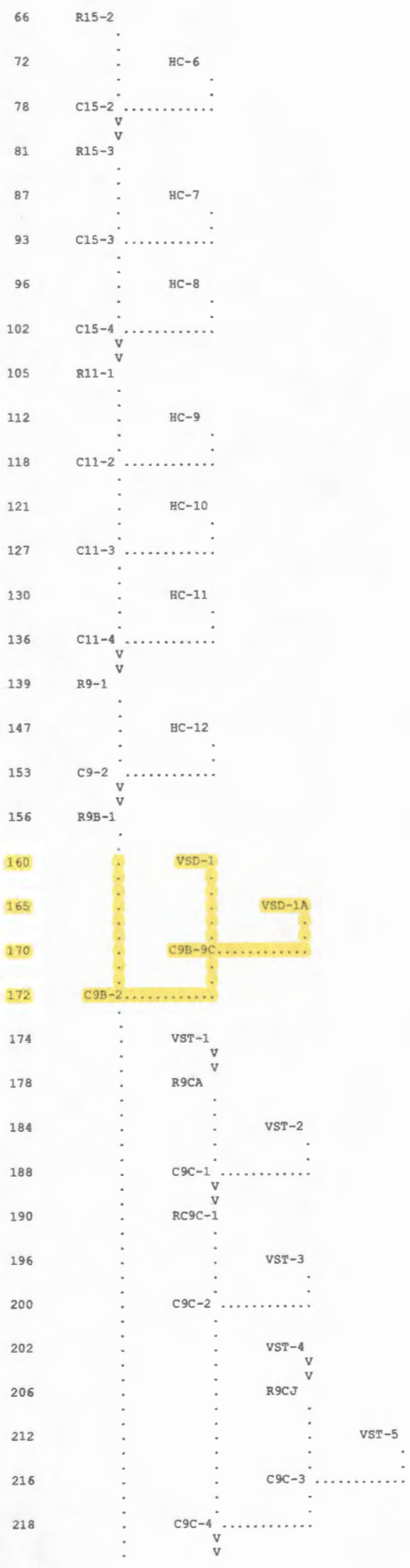

```
           216          KK  C9C-3 COMBINE
           217          HC        2
1                                              HEC-1 INPUT                                          PAGE  6

          LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


           218          KK  C9C-4 COMBINE
           219          HC        2

           220          KK  RC9C-4ROUTE THROUGH VST-6
           221          RS        2STOR            -1
           222          SV        0       2    3.42   10.77   18.89   29.62    49.1   57.03   62.21   65.78
           223          SV    70.26   74.58   77.68   82.56   87.07   91.28   94.99   96.74   98.46
           224          SQ        0     144     287     430     573     716     859    1002    1145    1288
           225          SQ     1432    1718    1861    2004    2147    2290    2433    2576    2719

           226          KK  VST-6          9CD
           227          BA     0.22       0
           228          LS     0.00   75.93    0.00
           229          US     0.77    0.58

           230          KK  C9C-5 COMBINE
           231          HC        2

           232          KK  VST-7          9CF
           233          BA     0.49       0
           234          LS     0.00   78.29    0.00
           235          US     1.21    0.60

           236          KK  VST-8          9CG
           237          BA     0.19       0
           238          LS     0.00   75.09    0.00
           239          US     0.68    0.58

           240          KK  R9CG  ROUTE THROUGH VST-9
           241          RS        4STOR            -1
           242          SV        0     1.1    2.08    3.98    7.64     9.3   11.99   23.43   42.56    51.1
           243          SV    51.43   51.63   51.76   52.54   53.16   54.29   55.61   56.67   61.06
           244          SQ        0      27      54      81     108     135     162     189     216     243
           245          SQ      269     296     323     350     377     404     431     458     511

           246          KK  VST-9          9CH
           247          BA     0.09       0
           248          LS     0.00   77.45    0.00
           249          US     0.59    0.57

           250          KK  C9C-5aCOMBINE
           251          HC        2

           252          KK  C9C-5bCOMBINE
           253          HC        2

           254          KK  RC9C-5ROUTE THROUGH VST-10
           255          RS        3STOR            -1
           256          SV        0    2.27   14.41   27.93   44.18   57.46   70.66    82.2   93.84  101.89
           257          SV   106.27  109.94  115.25  118.97   119.3  122.23  125.31  136.13  143.49
           258          SQ        0      94     187     280     374     467     560     654     747     840
           259          SQ      934    1027    1120    1214    1307    1400    1494    1587    1680
1                                              HEC-1 INPUT                                          PAGE  7

          LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


           260          KK  VST-10         9CI
           261          BA     0.07       0
           262          LS     0.00   79.30    0.00
           263          US     0.44    0.56

           264          KK  C9C-6 COMBINE
           265          HC        2

           266          KK  C9C-7 COMBINE
           267          HC        2

           268          KK  RC9C-7ROUTE THROUGH VST-11
           269          RS        4STOR            -1
           270          SV        0     8.6    17.7   37.52   65.98   80.65   101.2  106.86  124.27  141.15
           271          SV   156.01  170.24  187.64  194.88  204.65  217.45  229.19   246.7  259.89
           272          SQ        0     260     519     778    1037    1296    1555    1814    2073    2332
           273          SQ     2591    2850    3109    3368    3627    3886    4404    4663    4922

           274          KK  VST-11         9CE
           275          BA     0.17       0
           276          LS     0.00   77.69    0.00
           277          US     0.63    0.57

           278          KK  C9C-8 COMBINE
           279          HC        2

           280          KK  C9B-3 COMBINE
           281          HC        2

           282          KK  R9D-1 ROUTE TO VSD-2
           283          RS        6STOR            -1
           284          SV        1     183     506     599     696     800     932    1011    1212    1770
           285          SQ        1    1000    2520    3095    3744    4478    5442    6054    7624   12000

           286          KK  VSD-2          9D
           287          BA     1.14       0
           288          LS     0.00   77.00    0.00
           289          US     1.80    0.62

           290          KK  C9D-2 COMBINE
           291          HC        2
```

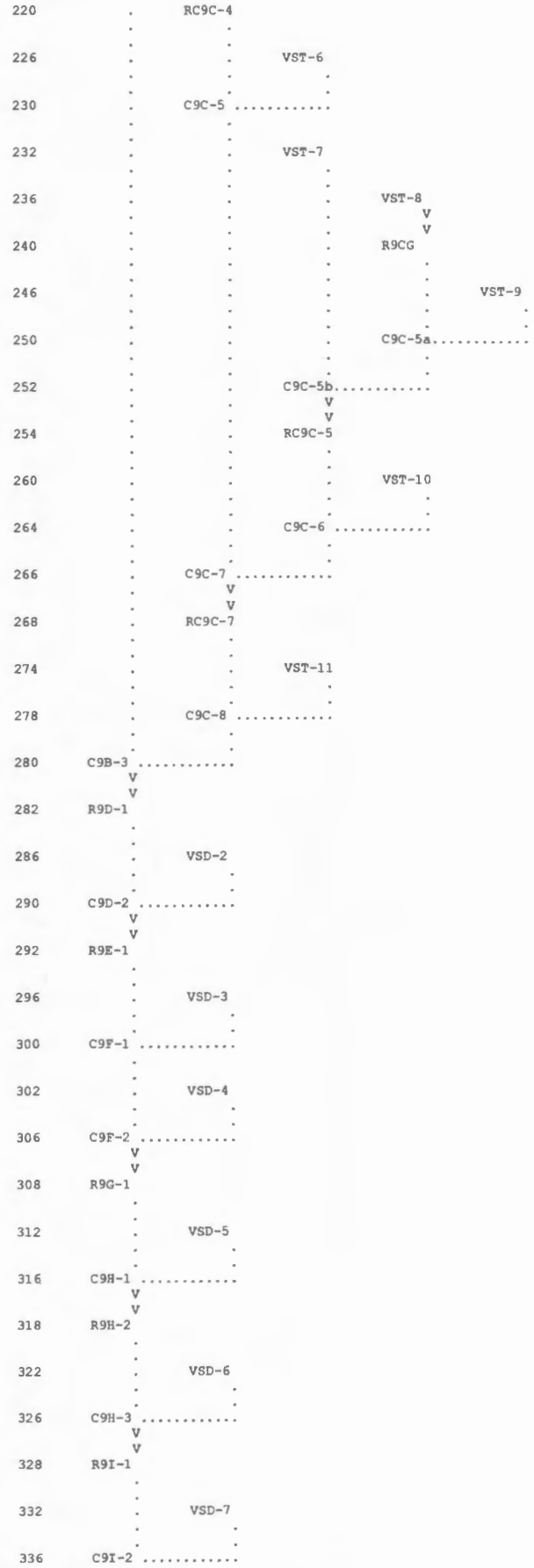
```
 292            KK  R9E-1 ROUTE TO VSD-3
 293            RS      5STOR          -1
 294            SV      1    250      664     740     818     902    1015    1079    1246    1698
 295            SQ      1   1100     2884    3543    4285    5125    6229    6929    8726   14000

 296            KK  VSD-3          9E
 297            BA   0.31       0
 298            LS   0.00   78.14    0.00
 299            US   1.36    0.61
```



```
LINE            ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 300            KK  C9F-1 COMBINE
 301            HC      2

 302            KK  VSD-4          9F
 303            BA   2.78       0
 304            LS   0.00   74.65    0.00
 305            US   2.06    0.63

 306            KK  C9F-2 COMBINE
 307            HC      2

 308            KK  R9G-1 ROUTE TO VSD-5
 309            RS      4STOR          -1
 310            SV      1    261      574     664     753     849     963    1033    1200    1625
 311            SQ      1   1200     3269    4015    4856    5808    7059    7853    9889   16000

 312            KK  VSD-5          9G
 313            BA   1.23       0
 314            LS   0.00   74.05    0.00
 315            US   1.46    0.61

 316            KK  C9H-1 COMBINE
 317            HC      2

 318            KK  R9H-2 ROUTE TO VSD-6
 319            RS      3STOR          -1
 320            SV      1    389      887    1019    1161    1310    1495    1606    1879    2541
 321            SQ      1   1300     3763    4622    5590    6686    8127    9040   11384   18000

 322            KK  VSD-6          9H
 323            BA   2.99       0
 324            LS   0.00   75.61    0.00
 325            US   3.42    0.66

 326            KK  C9H-3 COMBINE
 327            HC      2

 328            KK  R9I-1 ROUTE TO VSD-7
 329            RS      2STOR          -1
 330            SV      1    668     1598    1845    2099    2375    2709    2906    3398    4488
 331            SQ      1   1400     4313    5298    6407    7664    9315   10362   13049   20000

 332            KK  VSD-7          9I
 333            BA   2.63       0
 334            LS   0.00   74.94    0.00
 335            US   0.90    0.59

 336            KK  C9I-2 COMBINE
 337            HC      2
 338            ZZ
```

```
1
               SCHEMATIC DIAGRAM OF STREAM NETWORK
INPUT
 LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   10     HC-1
            .
            .
   17       .       HC-2
            .           .
            .           .
   23     C18-1 ............
            .
            .
   26       .       HC-3
            .           .
            .           .
   32     C18-2 ............
            V
            V
   35     R17-1
            .
            .
   42       .       HC-4
            .           .
            .           .
   48     C17-2 ............
            V
            V
   51     R15-1
            .
            .
   57       .       HC-5
            .           .
            .           .
   63     C17-3 ............
            V
            V
```


66 R15-2
72 HC-6
78 C15-2
81 R15-3
87 HC-7
93 C15-3
96 HC-8
102 C15-4
105 R11-1
112 HC-9
118 C11-2
121 HC-10
127 C11-3
130 HC-11
136 C11-4
139 R9-1
147 HC-12
153 C9-2
156 R9B-1
160 VSD-1
165 VSD-1A
170 C9B-9C
172 C9B-2
174 VST-1
178 R9CA
184 VST-2
188 C9C-1
190 RC9C-1
196 VST-3
200 C9C-2
202 VST-4
206 R9CJ
212 VST-5
216 C9C-3
218 C9C-4



(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

1**********

*

* FLOOD HYDROGRAPH PACKAGE (HEC-1) *

****

*

* U.S. ARMY CORPS OF ENGINEERS *

```
*             JUN   1998             *
*          VERSION 4.1               *
*                                    *
* RUN DATE   08APR13  TIME  20:38:24 *
*                                    *
**************************************
```


```
*    HYDROLOGIC ENGINEERING CENTER    *
*         609 SECOND STREET           *
*       DAVIS, CALIFORNIA 95616       *
*         (916) 756-1104              *
*                                     *
***************************************
```


HIGGINBOTTOM CREEK DRAFT HYDROLOGY STUDY
CITY OF JONESBORO, AR PILOT STUDY BY C&B
FROM USACE FESIBILITY STUDY OF 1989
EXISTING CONDITION CN, TP, & CP FROM USGS LULC MAP
NEW PRECIPITATION BY SLN FROM TP-40/HYDRO 35
TOTAL AREA 21.67 SQ. MI., AREA REDUCTION 98%-REVISED BASIN IDENTIFIERS
100-YEAR MODEL FILE: HIG100E.DAT

9 IO OUTPUT CONTROL VARIABLES

IPRNT	5	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA

NMIN	5	MINUTES IN COMPUTATION INTERVAL
IDATE	12FEB 4	STARTING DATE
ITIME	1200	STARTING TIME
NQ	288	NUMBER OF HYDROGRAPH ORDINATES
NDDATE	13FEB 4	ENDING DATE
NDTIME	1155	ENDING TIME
ICENT	19	CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
TOTAL TIME BASE 23.92 HOURS

ENGLISH UNITS

DRAINAGE AREA	SQUARE MILES
PRECIPITATION DEPTH	INCHES
LENGTH, ELEVATION	FEET
FLOW	CUBIC FEET PER SECOND
STORAGE VOLUME	ACRE-FEET
SURFACE AREA	ACRES
TEMPERATURE	DEGREES FAHRENHEIT

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	HC-1	512.	12.33	110.	34.	34.	.23		
+	HYDROGRAPH AT	HC-2	581.	12.25	123.	38.	38.	.26		
+	2 COMBINED AT	C18-1	1091.	12.25	234.	72.	72.	.49		
+	HYDROGRAPH AT	HC-3	561.	12.42	137.	43.	43.	.27		
+	2 COMBINED AT	C18-2	1635.	12.33	370.	115.	115.	.76		
+	ROUTED TO	R17-1	1384.	12.58	370.	115.	115.	.76		
+	HYDROGRAPH AT	HC-4	538.	12.25	102.	32.	32.	.21		
+	2 COMBINED AT	C17-2	1773.	12.50	472.	146.	146.	.97		
+	ROUTED TO	R15-1	1738.	12.58	472.	146.	146.	.97		
+	HYDROGRAPH AT	HC-5	485.	12.42	118.	37.	37.	.24		
+	2 COMBINED AT	C17-3	2176.	12.58	590.	183.	183.	1.21		
+	ROUTED TO	R15-2	1775.	13.00	589.	182.	182.	1.21		
+	HYDROGRAPH AT	HC-6	454.	12.50	120.	37.	37.	.27		
+	2 COMBINED AT	C15-2	2074.	12.83	709.	219.	219.	1.48		
+	ROUTED TO	R15-3	1955.	13.17	709.	219.	219.	1.48		
+	HYDROGRAPH AT	HC-7	2480.	13.33	1228.	377.	377.	3.20		
+	2 COMBINED AT	C15-3	4419.	13.33	1925.	595.	595.	4.68		
	HYDROGRAPH AT									

+	HC-8	1103.	12.58	315.	96.	96.	.71
+ 2 COMBINED AT	C15-4	4994.	13.17	2237.	691.	691.	5.39
+ ROUTED TO	R11-1	4621.	14.00	2229.	682.	682.	5.39
+ HYDROGRAPH AT	HC-9	688.	12.83	250.	76.	76.	.59
+ 2 COMBINED AT	C11-2	4937.	14.00	2471.	757.	757.	5.98
+ HYDROGRAPH AT	HC-10	479.	13.58	256.	80.	80.	.63
+ 2 COMBINED AT	C11-3	5370.	13.92	2728.	838.	838.	6.61
+ HYDROGRAPH AT	HC-11	748.	13.08	322.	98.	98.	.81
+ 2 COMBINED AT	C11-4	5868.	13.92	3048.	935.	935.	7.42
+ ROUTED TO	R9-1	5106.	15.25	3035.	924.	924.	7.42
+ HYDROGRAPH AT	HC-12	503.	13.17	234.	72.	72.	.58
+ 2 COMBINED AT	C9-2	5307.	15.17	3260.	995.	995.	8.00
+ ROUTED TO	R9B-1	4533.	15.83	3014.	974.	974.	8.00
+ HYDROGRAPH AT	VSD-1	397.	13.33	198.	61.	61.	.48
+ HYDROGRAPH AT	VSD-1A	347.	12.08	45.	15.	15.	.08
+ 2 COMBINED AT	C9B-9C	426.	12.08	238.	76.	76.	.56
+ 2 COMBINED AT	C9B-2	4686.	15.83	3188.	1051.	1051.	8.56
+ HYDROGRAPH AT	VST-1	424.	12.42	103.	31.	31.	.27
+ ROUTED TO	R9CA	221.	14.08	103.	31.	31.	.27
+ HYDROGRAPH AT	VST-2	407.	12.50	109.	33.	33.	.25
+ 2 COMBINED AT	C9C-1	530.	12.58	211.	64.	64.	.52
+ ROUTED TO	RC9C-1	458.	13.08	211.	64.	64.	.52
+ HYDROGRAPH AT	VST-3	86.	12.25	17.	5.	5.	.04
+ 2 COMBINED AT	C9C-2	483.	12.92	228.	69.	69.	.56
+ HYDROGRAPH AT	VST-4	365.	12.33	82.	25.	25.	.20
+ ROUTED TO	R9CJ	276.	12.67	82.	25.	25.	.20
+ HYDROGRAPH AT	VST-5	108.	12.25	21.	6.	6.	.05
+ 2 COMBINED AT	C9C-3	343.	12.58	103.	31.	31.	.25
+ 2 COMBINED AT	C9C-4	822.	12.58	330.	101.	101.	.81
+ ROUTED TO	RC9C-4	672.	13.50	330.	101.	101.	.81
+ HYDROGRAPH AT	VST-6	260.	12.75	90.	27.	27.	.22
+ 2 COMBINED AT	C9C-5	852.	13.17	420.	128.	128.	1.03
+ HYDROGRAPH AT	VST-7	458.	13.17	208.	64.	64.	.49
+ HYDROGRAPH AT	VST-8	239.	12.67	77.	23.	23.	.19
+ ROUTED TO	R9CG	160.	14.17	76.	23.	23.	.19
HYDROGRAPH AT							

+		VST-9	130.	12.58	38.	12.	12.	.09
+	2 COMBINED AT	C9C-5a	202.	13.33	114.	35.	35.	.28
+	2 COMBINED AT	C9C-5b	652.	13.25	322.	99.	99.	.77
+	ROUTED TO	RC9C-5	471.	15.08	316.	98.	98.	.77
+	HYDROGRAPH AT	VST-10	123.	12.42	31.	10.	10.	.07
+	2 COMBINED AT	C9C-6	484.	15.00	339.	108.	108.	.84
+	2 COMBINED AT	C9C-7	1132.	13.67	755.	236.	236.	1.87
+	ROUTED TO	RC9C-7	1088.	14.67	753.	235.	235.	1.87
+	HYDROGRAPH AT	VST-11	234.	12.58	73.	22.	22.	.17
+	2 COMBINED AT	C9C-8	1137.	14.58	821.	257.	257.	2.04
+	2 COMBINED AT	C9B-3	5697.	15.75	3954.	1307.	1307.	10.60
+	ROUTED TO	R9D-1	5296.	17.17	3774.	1236.	1236.	10.60
+	HYDROGRAPH AT	VSD-2	786.	13.75	448.	142.	142.	1.14
+	2 COMBINED AT	C9D-2	5548.	17.17	4001.	1378.	1378.	11.74
+	ROUTED TO	R9E-1	5249.	18.50	3786.	1178.	1178.	11.74
+	HYDROGRAPH AT	VSD-3	267.	13.33	130.	40.	40.	.31
+	2 COMBINED AT	C9F-1	5286.	18.42	3813.	1218.	1218.	12.05
+	HYDROGRAPH AT	VSD-4	1643.	14.00	1008.	324.	324.	2.78
+	2 COMBINED AT	C9F-2	5749.	18.42	4155.	1542.	1542.	14.83
+	ROUTED TO	R9G-1	5295.	19.83	4041.	1290.	1290.	14.83
+	HYDROGRAPH AT	VSD-5	911.	13.42	465.	143.	143.	1.23
+	2 COMBINED AT	C9H-1	5398.	19.83	4132.	1434.	1434.	16.06
+	ROUTED TO	R9H-2	4605.	22.00	3444.	1004.	1004.	16.06
+	HYDROGRAPH AT	VSD-6	1275.	15.42	960.	336.	336.	2.99
+	2 COMBINED AT	C9H-3	4955.	21.92	3907.	1340.	1340.	19.05
+	ROUTED TO	R9I-1	3586.	23.92	2059.	603.	603.	19.05
+	HYDROGRAPH AT	VSD-7	2747.	12.92	1050.	317.	317.	2.63
+	2 COMBINED AT	C9I-2	3693.	23.92	2215.	920.	920.	21.68

*** NORMAL END OF HEC-1 ***

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*              JUN  1998                *
*           VERSION 4.1                 *
*                                       *
*  RUN DATE   08APR13  TIME  20:37:30   *
*                                       *
*****************************************
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Unico Bank Development with Detention

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*****************************************
*                                       *
*    U.S. ARMY CORPS OF ENGINEERS       *
*    HYDROLOGIC ENGINEERING CENTER      *
*         609 SECOND STREET             *
*       DAVIS, CALIFORNIA 95616         *
*           (916) 756-1104              *
*                                       *
*****************************************
```

```
X     X  XXXXXXX   XXXXX           X
X     X  X        X     X         XX
X     X  X        X               X
XXXXXXX  XXXX     X        XXXXX  X
X     X  X        X               X
X     X  X        X     X         X
X     X  XXXXXXX   XXXXX          XXX
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THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.
THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION
NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,
DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION
KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM


```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

              *DIAGRAM
    1         ID        HIGGINBOTTOM CREEK DRAFT HYDROLOGY STUDY
    2         ID        CITY OF JONESBORO, AR PILOT STUDY BY C&B
    3         ID        FROM USACE FESIBILITY STUDY OF 1989
    4         ID        EXISTING CONDITION CN, TP, & CP FROM USGS LULC MAP
    5         ID        NEW PRECIPITATION BY SLN FROM TP-40/HYDRO 35
    6         ID        TOTAL AREA 21.67 SQ. MI., AREA REDUCTION 98%-REVISED BASIN IDENTIFIERS
    7         ID        100-YEAR MODEL          FILE: HIG100E.DAT
    8         IT       5 12FEB04    1200     288
    9         IO       5

   10         KK  HC-1          18A
   11         KM        18A PS TO HC-1
   12         BA    0.23        0
   13         PH       1        1    0.81    1.74    3.58    4.13    4.56    5.46    6.51     7.5
   14         LS    0.00   83.34    0.00
   15         US    0.31    0.54
   16         BF       1        1  1.3195

   17         KK  HC-2          17A
   18         KM        17A PS TO HC-2
   19         BA    0.26        0
   20         LS    0.00   82.85    0.00
   21         US    0.30    0.54
   22         BF       1        1  1.3195

   23         KK  C18-1
   24         KM        HC-1 & HC-2 ADDED
   25         HC       2

   26         KK  HC-3          16A
   27         KM        16A PS TO HC-3
   28         BA    0.27        0
   29         LS    0.00   86.66    0.00
   30         US    0.42    0.55
   31         BF       1        1  1.3195

   32         KK  C18-2
   33         KM        HC-3 ADDED TO C18-1
   34         HC       2

   35         KK  R17-1
   36         KM        ROUT HC-4 MILE 4.34 THRU 3.85
   37         RS      1STOR          -1       0
   38         SV             2.8    4.77    6.81    9.91   13.74   15.86   17.48   18.88   22.02
   39         SV   24.81   26.55   28.58   30.54   32.31    34.2   35.98   37.89   39.65   41.59
   40         SQ       0     117     233     349     465     581     697     813     929    1045
   41         SQ    1161    1277    1393    1509    1625    1741    1857    1973    2089    2205

   42         KK  HC-4          17B
   43         KM        17B PS TO HC-4
   44         BA    0.21        0
   45         LS    0.00   84.04    0.00
   46         US    0.25    0.53
   47         BF       1        1  1.3195
```



```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

   48         KK  C17-2
   49         KM        HC-4 ADDED AT MILE 3.85
   50         HC       2

   51         KK  R15-1
   52         RS      1STOR          -1       0
   53         SV       0    1.17    2.12    2.99    3.91    5.37    8.14   14.01   14.51   15.44
```

```
  54         SV   19.1   20.17   21.47   22.63   23.79   24.65   25.58   26.75
  55         SQ      0     194     387     580     774     967    1160    1353    1547    1740
  56         SQ   1933    2513    2706    2899    3093    3286    3479    3672

  57         KK  HC-5          14A
  58         KM       14A PS TO HC-5
  59         BA   0.24       0
  60         LS   0.00   84.91    0.00
  61         US   0.42    0.55
  62         BF      1       1  1.3195

  63         KK  C17-3
  64         KM        HC-5 ADDED AT MILE 3.85
  65         HC      2

  66         KK  R15-2
  67         RS       2STOR          -1       0
  68         SV      0    4.56    7.68   10.82   14.19   17.58   22.94   34.21    46.4    62.6
  69         SV  72.22   77.53   81.56   85.07   89.06    92.2   95.81   99.14  102.54  105.57
  70         SQ      0     245     489     733     977    1221    1465    1709    1953    2197
  71         SQ   2441    2685    2929    3173    3417    3661    3905    4149    4393    4637

  72         KK  HC-6          15A
  73         KM       15A PS TO HC-6
  74         BA   0.27       0
  75         LS   0.00   79.35    0.00
  76         US   0.47    0.56
  77         BF      1       1  1.3195

  78         KK  C15-2
  79         KM        HC-6 ADDED AT MILE 2.99
  80         HC      2

  81         KK  R15-3
  82         RS       1STOR          -1       0
  83         SV      0    2.33    4.03    5.78    7.64    9.96    13.4   18.81   26.51   47.64
  84         SV  85.81     109  116.45  121.66  125.87   130.1  133.58   138.1  142.55  147.13
  85         SQ      0     245     489     733     977    1221    1465    1709    1953    2197
  86         SQ   2441    2685    2929    3173    3417    3661    3905    4149    4393    4637

  87         KK  HC-7          19A
  88         KM       19A PS TO HC-7
  89         BA   3.20       0
  90         LS   0.00   74.41    0.00
  91         US   1.40    0.61
  92         BF      1       1  1.3195
```



```
  93         KK  C15-3
  94         KM       HC-7 ADDED AT MILE 2.99
  95         HC      2

  96         KK  HC-8          13A
  97         KM       13A PS TO HC-8
  98         BA   0.71       0
  99         LS   0.00   79.46    0.00
 100         US   0.55    0.57
 101         BF      1       1  1.3195

 102         KK  C15-4
 103         KM       HC-8 ADDED  AT  MILE 2.99
 104         HC      2

 105         KK  R11-1
 106         KM       ROUT HC MILE 2.99 THRU 1.78
 107         RS      5STOR          -1       0
 108         SV      0   31.89   51.37   68.65   84.76  100.18  115.52  130.24  144.64   160.7
 109         SV 187.03   222.9  251.15  289.32  330.75  379.64  415.98  465.37  511.69  552.16
 110         SQ      0     392     784    1176    1568    1959    2351    2743    3135    3527
 111         SQ   3918    4310    4702    5094    5486    5877    6269    6661    7053    7444

 112         KK  HC-9          12A
 113         KM       12A PS TO HC-9
 114         BA   0.59       0
 115         LS   0.00   77.51    0.00
 116         US   0.85    0.59
 117         BF      1       1  1.3195

 118         KK  C11-2
 119         KM        HC-9 ADDED  AT MILE 1.78
 120         HC      2

 121         KK  HC-10         11A
 122         KM       11A PS TO HC-10
 123         BA   0.63       0
 124         LS   0.00   77.73    0.00
 125         US   1.62    0.62
 126         BF      1       1  1.3195

 127         KK  C11-3
 128         KM        HC-10  ADDED
 129         HC      2

 130         KK  HC-11         10A
 131         KM       10A PS TO HC-11
 132         BA   0.81       0
 133         LS   0.00   75.14    0.00
 134         US   1.10    0.60
 135         BF      1       1  1.3195
```

```
136          KK  C11-4
137          KM        HC-11 ADDED
138          HC       2

139          KK  R9-1
140          KM        ROUT HC-12   MILE 1.78 THRU 0.0
141          RL       0       0
142          RS       4STOR          -1       0
143          SV       0   34.38   56.61   76.51   96.37  114.78  137.13  166.76  212.66  269.45
144          SV  343.32   464.5  605.96  748.93  907.48 1089.37 1128.88
145          SQ       0     512    1023    1534    2045    2556    3067    3578    4089    4600
146          SQ    5112    5623    6134    6645    7156    9200    9711

147          KK  HC-12          9A
148          KM        9A PS TO HC-12
149          BA    0.58       0
150          LS    0.00   76.18    0.00
151          US    1.24    0.60
152          BF       1       1  1.3195

153          KK  C9-2
154          KM        FLOWS AT MOUTH
155          HC       2

156          KK  R9B-1 ROUTE TO VSD-1
157          RS       1STOR          -1
158          SV       1      82     230     291     342     398     481     535     655     964
159          SQ       1     900    2047    2515    3041    3637    4421    4918    6196   10000

160          KK   VSD-1      9B
161          BA    0.48       0
162          LS       0   77.79       0
163          US    1.41    0.61
164          BF       1       1  1.3195

165          KK  VSD-1A      9C
166          BA    0.08       0
167          LS       0      95       0
168          US     0.1    0.55
169          BF       1       1  1.3195

170          KK   R9C-1 ROUTE  TO POND
171          RS       1     STOR      -1
172          SV       1   0.965   2.027    3.19   4.458   5.837    7.33
173          SQ       1   24.94   62.66   87.53  195.72  254.66  288.76

174          KK  C9B-9C COMBINE
175          HC       2
1                                        HEC-1 INPUT                                        PAGE  5

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9.....10

176          KK   C9B-2 COMBINE
177          HC       2

178          KK  VST-1          9CA
179          BA    0.27       0
180          LS    0.00   72.65    0.00
181          US    0.40    0.55

182          KK  R9CA  ROUTE THROUGH VST-2
183          RS       4STOR          -1
184          SV       0    3.18    5.27    7.09    11.3    17.4   26.47   47.74   63.79   69.25
185          SV   74.55   79.61   80.88   84.93   87.76   91.87   93.88   98.77  102.34  106.68
186          SQ       0      43      86     128     171     213     256     298     341     383
187          SQ     426     468     511     553     596     638     681     723     766     808

188          KK  VST-2          9CB
189          BA    0.25       0
190          LS    0.00   78.63    0.00
191          US    0.50    0.56

192          KK  C9C-1 COMBINE
193          HC       2

194          KK  RC9C-1ROUTE THROUGH VST-3
195          RS       2STOR          -1
196          SV       0    0.57       1    1.41    2.46    4.25    9.34   17.07    18.5   18.69
197          SV   18.85      19   19.19   19.33   19.38   19.42   20.17    20.6   21.04   21.86
198          SQ       0      84     168     252     336     420     504     588     672     756
199          SQ     840     924    1008    1092    1176    1260    1344    1428    1512    1596

200          KK  VST-3          9CC
201          BA    0.04       0
202          LS    0.00   77.39    0.00
203          US    0.27    0.54

204          KK  C9C-2 COMBINE
205          HC       2

206          KK  VST-4          9CJ
207          BA    0.20       0
208          LS    0.00   75.80    0.00
209          US    0.35    0.55

210          KK  R9CJ  ROUTE THROUGH VST-5
211          RS       1STOR          -1
212          SV       0    0.15    1.54    2.86     4.3    5.67    8.11    9.54    9.98   10.32
213          SV   10.61   10.84    11.1   11.35   11.54    12.3   12.68   13.04   13.61
214          SQ       0      44      87     130     173     217     303     346     389     433
215          SQ     476     519     562     605     649     692     735     778     821
1                                        HEC-1 INPUT                                        PAGE  6
```

```
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

 216          KK  VST-5         9CK
 217          BA    0.05        0
 218          LS    0.00   75.69    0.00
 219          US    0.25    0.53

 220          KK  C9C-3 COMBINE
 221          HC       2

 222          KK  C9C-4 COMBINE
 223          HC       2

 224          KK  RC9C-4ROUTE THROUGH VST-6
 225          RS       2STOR          -1
 226          SV       0       2    3.42   10.77   18.89   29.62    49.1   57.03   62.21   65.78
 227          SV   70.26   74.58   77.68   82.56   87.07   91.28   94.99   96.74   98.46
 228          SQ       0     144     287     430     573     716     859    1002    1145    1288
 229          SQ    1432    1718    1861    2004    2147    2290    2433    2576    2719

 230          KK  VST-6         9CD
 231          BA    0.22        0
 232          LS    0.00   75.93    0.00
 233          US    0.77    0.58

 234          KK  C9C-5 COMBINE
 235          HC       2

 236          KK  VST-7         9CF
 237          BA    0.49        0
 238          LS    0.00   78.29    0.00
 239          US    1.21    0.60

 240          KK  VST-8         9CG
 241          BA    0.19        0
 242          LS    0.00   75.09    0.00
 243          US    0.68    0.58

 244          KK  R9CG  ROUTE THROUGH VST-9
 245          RS       4STOR          -1
 246          SV       0     1.1    2.08    3.98    7.64     9.3   11.99   23.43   42.56    51.1
 247          SV   51.43   51.63   51.76   52.54   53.16   54.29   55.61   56.67   61.06
 248          SQ       0      27      54      81     108     135     162     189     216     243
 249          SQ     269     296     323     350     377     404     431     458     511

 250          KK  VST-9         9CH
 251          BA    0.09        0
 252          LS    0.00   77.45    0.00
 253          US    0.59    0.57

 254          KK  C9C-5aCOMBINE
 255          HC       2
1                                        HEC-1 INPUT                                    PAGE  7
LINE          ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

 256          KK  C9C-5bCOMBINE
 257          HC       2

 258          KK  RC9C-5ROUTE THROUGH VST-10
 259          RS       3STOR          -1
 260          SV       0    2.27   14.41   27.93   44.18   57.46   70.66    82.2   93.84  101.89
 261          SV  106.27  109.94  115.25  118.97   119.3  122.23  125.31  136.13  143.49
 262          SQ       0      94     187     280     374     467     560     654     747     840
 263          SQ     934    1027    1120    1214    1307    1400    1494    1587    1680

 264          KK  VST-10        9CI
 265          BA    0.07        0
 266          LS    0.00   79.30    0.00
 267          US    0.44    0.56

 268          KK  C9C-6 COMBINE
 269          HC       2

 270          KK  C9C-7 COMBINE
 271          HC       2

 272          KK  RC9C-7ROUTE THROUGH VST-11
 273          RS       4STOR          -1
 274          SV       0     8.6    17.7   37.52   65.98   80.65    101.2  106.86  124.27  141.15
 275          SV  156.01  170.24  187.64  194.88  204.65  217.45  229.19   246.7  259.89
 276          SQ       0     260     519     778    1037    1296    1555    1814    2073    2332
 277          SQ    2591    2850    3109    3368    3627    3886    4404    4663    4922

 278          KK  VST-11        9CE
 279          BA    0.17        0
 280          LS    0.00   77.69    0.00
 281          US    0.63    0.57

 282          KK  C9C-8 COMBINE
 283          HC       2

 284          KK  C9B-3 COMBINE
 285          HC       2

 286          KK  R9D-1 ROUTE TO VSD-2
 287          RS       6STOR          -1
 288          SV       1     183     506     599     696     800     932    1011    1212    1770
 289          SQ       1    1000    2520    3095    3744    4478    5442    6054    7624   12000

 290          KK  VSD-2         9D
 291          BA    1.14        0
```

```
              292           LS    0.00   77.00    0.00
              293           US    1.80    0.62
1                                                     HEC-1 INPUT                                             PAGE  8

             LINE           ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


              294           KK  C9D-2 COMBINE
              295           HC       2

              296           KK  R9E-1 ROUTE TO VSD-3
              297           RS       5STOR           -1
              298           SV       1     250     664     740     818     902    1015    1079    1246    1698
              299           SQ       1    1100    2884    3543    4285    5125    6229    6929    8726   14000

              300           KK  VSD-3           9E
              301           BA    0.31       0
              302           LS    0.00   78.14    0.00
              303           US    1.36    0.61

              304           KK  C9F-1 COMBINE
              305           HC       2

              306           KK  VSD-4           9F
              307           BA    2.78       0
              308           LS    0.00   74.65    0.00
              309           US    2.06    0.63

              310           KK  C9F-2 COMBINE
              311           HC       2

              312           KK  R9G-1 ROUTE TO VSD-5
              313           RS       4STOR           -1
              314           SV       1     261     574     664     753     849     963    1033    1200    1625
              315           SQ       1    1200    3269    4015    4856    5808    7059    7853    9889   16000

              316           KK  VSD-5           9G
              317           BA    1.23       0
              318           LS    0.00   74.05    0.00
              319           US    1.46    0.61

              320           KK  C9H-1 COMBINE
              321           HC       2

              322           KK  R9H-2 ROUTE TO VSD-6
              323           RS       3STOR           -1
              324           SV       1     389     887    1019    1161    1310    1495    1606    1879    2541
              325           SQ       1    1300    3763    4622    5590    6686    8127    9040   11384   18000

              326           KK  VSD-6           9H
              327           BA    2.99       0
              328           LS    0.00   75.61    0.00
              329           US    3.42    0.66

              330           KK  C9H-3 COMBINE
              331           HC       2
1                                                     HEC-1 INPUT                                             PAGE  9

             LINE           ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

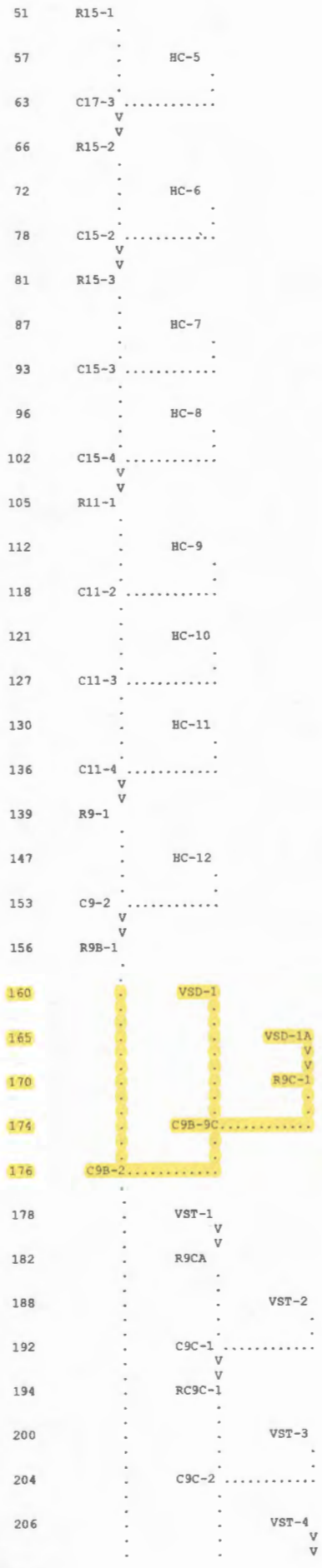

              332           KK  R9I-1 ROUTE TO VSD-7
              333           RS       2STOR           -1
              334           SV       1     668    1598    1845    2099    2375    2709    2906    3398    4488
              335           SQ       1    1400    4313    5298    6407    7664    9315   10362   13049   20000

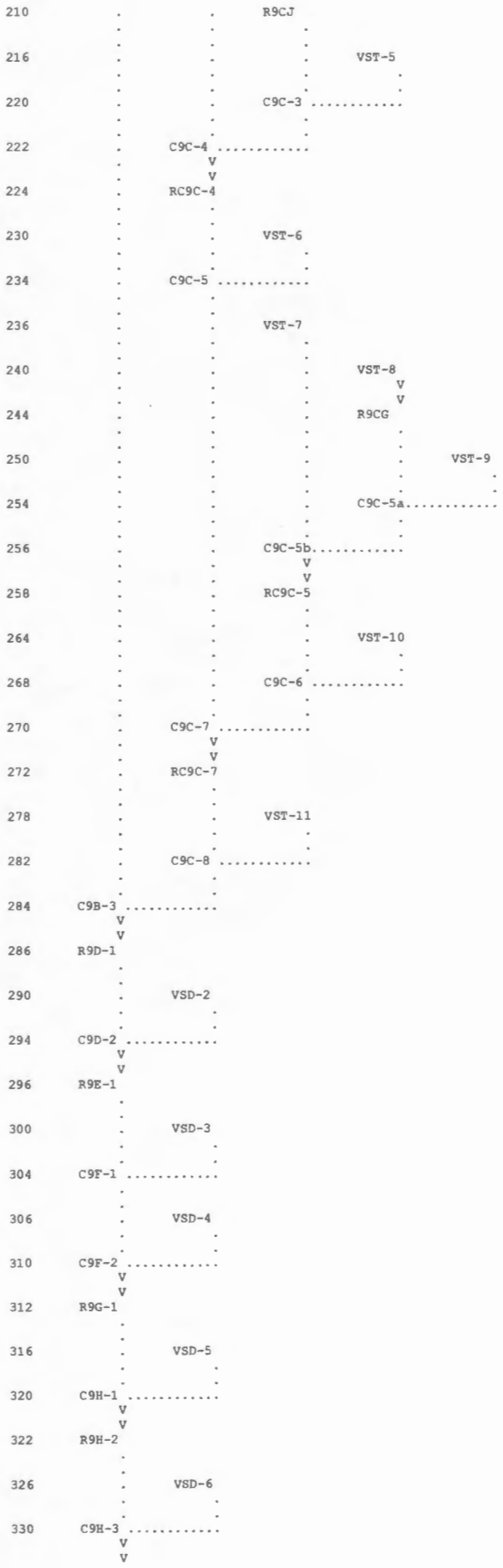
              336           KK  VSD-7           9I
              337           BA    2.63       0
              338           LS    0.00   74.94    0.00
              339           US    0.90    0.59

              340           KK  C9I-2 COMBINE
              341           HC       2
              342           ZZ
1
                 SCHEMATIC DIAGRAM OF STREAM NETWORK
  INPUT
   LINE      (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

    NO.      (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

    10       HC-1
               .
               .
    17         .       HC-2
               .          .
               .          .
    23       C18-1 ...........
               .
               .
    26         .       HC-3
               .          .
               .          .
    32       C18-2 ...........
               V
               V
    35       R17-1
               .
               .
    42         .       HC-4
               .          .
               .          .
    48       C17-2 ...........
               V
               V
```


51 R15-1
57 HC-5
63 C17-3
66 R15-2
72 HC-6
78 C15-2
81 R15-3
87 HC-7
93 C15-3
96 HC-8
102 C15-4
105 R11-1
112 HC-9
118 C11-2
121 HC-10
127 C11-3
130 HC-11
136 C11-4
139 R9-1
147 HC-12
153 C9-2
156 R9B-1
160 VSD-1
165 VSD-1A
170 R9C-1
174 C9B-9C
176 C9B-2
178 VST-1
182 R9CA
188 VST-2
192 C9C-1
194 RC9C-1
200 VST-3
204 C9C-2
206 VST-4


210 R9CJ
216 VST-5
220 C9C-3
222 C9C-4
224 RC9C-4
230 VST-6
234 C9C-5
236 VST-7
240 VST-8
244 R9CG
250 VST-9
254 C9C-5a
256 C9C-5b
258 RC9C-5
264 VST-10
268 C9C-6
270 C9C-7
272 RC9C-7
278 VST-11
282 C9C-8
284 C9B-3
286 R9D-1
290 VSD-2
294 C9D-2
296 R9E-1
300 VSD-3
304 C9F-1
306 VSD-4
310 C9F-2
312 R9G-1
316 VSD-5
320 C9H-1
322 R9H-2
326 VSD-6
330 C9H-3

```
  332      R9I-1
                .
                .
  336           .      VSD-7
                .          .
                .          .
  340      C9I-2 ..........
```

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION

```
1*****************************************
*                                       *
*   FLOOD HYDROGRAPH PACKAGE  (HEC-1)   *
*             JUN  1998                 *
*           VERSION 4.1                 *
*                                       *
*  RUN DATE   08APR13  TIME  20:37:30   *
*                                       *
*****************************************
```

```
*************************************
*                                   *
*    U.S. ARMY CORPS OF ENGINEERS   *
*    HYDROLOGIC ENGINEERING CENTER  *
*          609 SECOND STREET        *
*       DAVIS, CALIFORNIA 95616     *
*           (916) 756-1104          *
*                                   *
*************************************
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HIGGINBOTTOM CREEK DRAFT HYDROLOGY STUDY
CITY OF JONESBORO, AR PILOT STUDY BY C&B
FROM USACE FESIBILITY STUDY OF 1989
EXISTING CONDITION CN, TP, & CP FROM USGS LULC MAP
NEW PRECIPITATION BY SLN FROM TP-40/HYDRO 35
TOTAL AREA 21.67 SQ. MI., AREA REDUCTION 98%-REVISED BASIN IDENTIFIERS
100-YEAR MODEL FILE: HIG100E.DAT

9 IO OUTPUT CONTROL VARIABLES

IPRNT	5	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

IT HYDROGRAPH TIME DATA

NMIN	5	MINUTES IN COMPUTATION INTERVAL
IDATE	12FEB 4	STARTING DATE
ITIME	1200	STARTING TIME
NQ	288	NUMBER OF HYDROGRAPH ORDINATES
NDDATE	13FEB 4	ENDING DATE
NDTIME	1155	ENDING TIME
ICENT	19	CENTURY MARK

COMPUTATION INTERVAL .08 HOURS
TOTAL TIME BASE 23.92 HOURS

ENGLISH UNITS

DRAINAGE AREA	SQUARE MILES
PRECIPITATION DEPTH	INCHES
LENGTH, ELEVATION	FEET
FLOW	CUBIC FEET PER SECOND
STORAGE VOLUME	ACRE-FEET
SURFACE AREA	ACRES
TEMPERATURE	DEGREES FAHRENHEIT

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

	OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
+	HYDROGRAPH AT	HC-1	512.	12.33	110.	34.	34.	.23		
+	HYDROGRAPH AT	HC-2	581.	12.25	123.	38.	38.	.26		
+	2 COMBINED AT	C18-1	1091.	12.25	234.	72.	72.	.49		
+	HYDROGRAPH AT	HC-3	561.	12.42	137.	43.	43.	.27		
+	2 COMBINED AT	C18-2	1635.	12.33	370.	115.	115.	.76		
+	ROUTED TO	R17-1	1384.	12.58	370.	115.	115.	.76		
+	HYDROGRAPH AT	HC-4	538.	12.25	102.	32.	32.	.21		
+	2 COMBINED AT	C17-2	1773.	12.50	472.	146.	146.	.97		
+	ROUTED TO	R15-1	1738.	12.58	472.	146.	146.	.97		
+	HYDROGRAPH AT	HC-5	485.	12.42	118.	37.	37.	.24		
+	2 COMBINED AT	C17-3	2176.	12.58	590.	183.	183.	1.21		
+	ROUTED TO	R15-2	1775.	13.00	589.	182.	182.	1.21		
+	HYDROGRAPH AT	HC-6	454.	12.50	120.	37.	37.	.27		
	2 COMBINED AT									

+		C15-2	2074.	12.83	709.	219.	219.	1.48
+	ROUTED TO	R15-3	1955.	13.17	709.	219.	219.	1.48
+	HYDROGRAPH AT	HC-7	2480.	13.33	1228.	377.	377.	3.20
+	2 COMBINED AT	C15-3	4419.	13.33	1925.	595.	595.	4.68
+	HYDROGRAPH AT	HC-8	1103.	12.58	315.	96.	96.	.71
+	2 COMBINED AT	C15-4	4994.	13.17	2237.	691.	691.	5.39
+	ROUTED TO	R11-1	4621.	14.00	2229.	682.	682.	5.39
+	HYDROGRAPH AT	HC-9	688.	12.83	250.	76.	76.	.59
+	2 COMBINED AT	C11-2	4937.	14.00	2471.	757.	757.	5.98
+	HYDROGRAPH AT	HC-10	479.	13.58	256.	80.	80.	.63
+	2 COMBINED AT	C11-3	5370.	13.92	2728.	838.	838.	6.61
+	HYDROGRAPH AT	HC-11	748.	13.08	322.	98.	98.	.81
+	2 COMBINED AT	C11-4	5868.	13.92	3048.	935.	935.	7.42
+	ROUTED TO	R9-1	5106.	15.25	3035.	924.	924.	7.42
+	HYDROGRAPH AT	HC-12	503.	13.17	234.	72.	72.	.58
+	2 COMBINED AT	C9-2	5307.	15.17	3260.	995.	995.	8.00
+	ROUTED TO	R9B-1	4533.	15.83	3014.	974.	974.	8.00
+	HYDROGRAPH AT	VSD-1	397.	13.33	198.	61.	61.	.48
+	HYDROGRAPH AT	VSD-1A	347.	12.08	45.	15.	15.	.08
+	ROUTED TO	R9C-1	241.	12.25	46.	15.	15.	.08
+	2 COMBINED AT	C9B-9C	435.	13.33	239.	76.	76.	.56
+	2 COMBINED AT	C9B-2	4686.	15.83	3189.	1051.	1051.	8.56
+	HYDROGRAPH AT	VST-1	424.	12.42	103.	31.	31.	.27
+	ROUTED TO	R9CA	221.	14.08	103.	31.	31.	.27
+	HYDROGRAPH AT	VST-2	407.	12.50	109.	33.	33.	.25
+	2 COMBINED AT	C9C-1	530.	12.58	211.	64.	64.	.52
+	ROUTED TO	RC9C-1	458.	13.08	211.	64.	64.	.52
+	HYDROGRAPH AT	VST-3	86.	12.25	17.	5.	5.	.04
+	2 COMBINED AT	C9C-2	483.	12.92	228.	69.	69.	.56
+	HYDROGRAPH AT	VST-4	365.	12.33	82.	25.	25.	.20
+	ROUTED TO	R9CJ	276.	12.67	82.	25.	25.	.20
+	HYDROGRAPH AT	VST-5	108.	12.25	21.	6.	6.	.05
+	2 COMBINED AT	C9C-3	343.	12.58	103.	31.	31.	.25
+	2 COMBINED AT	C9C-4	822.	12.58	330.	101.	101.	.81
+	ROUTED TO	RC9C-4	672.	13.50	330.	101.	101.	.81
	HYDROGRAPH AT							

+		VST-6	260.	12.75	90.	27.	27.	.22
+	2 COMBINED AT	C9C-5	852.	13.17	420.	128.	128.	1.03
+	HYDROGRAPH AT	VST-7	458.	13.17	208.	64.	64.	.49
+	HYDROGRAPH AT	VST-8	239.	12.67	77.	23.	23.	.19
+	ROUTED TO	R9CG	160.	14.17	76.	23.	23.	.19
+	HYDROGRAPH AT	VST-9	130.	12.58	38.	12.	12.	.09
+	2 COMBINED AT	C9C-5a	202.	13.33	114.	35.	35.	.28
+	2 COMBINED AT	C9C-5b	652.	13.25	322.	99.	99.	.77
+	ROUTED TO	RC9C-5	471.	15.08	316.	98.	98.	.77
+	HYDROGRAPH AT	VST-10	123.	12.42	31.	10.	10.	.07
+	2 COMBINED AT	C9C-6	484.	15.00	339.	108.	108.	.84
+	2 COMBINED AT	C9C-7	1132.	13.67	755.	236.	236.	1.87
+	ROUTED TO	RC9C-7	1088.	14.67	753.	235.	235.	1.87
+	HYDROGRAPH AT	VST-11	234.	12.58	73.	22.	22.	.17
+	2 COMBINED AT	C9C-8	1137.	14.58	821.	257.	257.	2.04
+	2 COMBINED AT	C9B-3	5697.	15.75	3957.	1307.	1307.	10.60
+	ROUTED TO	R9D-1	5296.	17.17	3777.	1236.	1236.	10.60
+	HYDROGRAPH AT	VSD-2	786.	13.75	448.	142.	142.	1.14
+	2 COMBINED AT	C9D-2	5549.	17.17	4004.	1378.	1378.	11.74
+	ROUTED TO	R9E-1	5251.	18.50	3788.	1178.	1178.	11.74
+	HYDROGRAPH AT	VSD-3	267.	13.33	130.	40.	40.	.31
+	2 COMBINED AT	C9F-1	5288.	18.42	3815.	1218.	1218.	12.05
+	HYDROGRAPH AT	VSD-4	1643.	14.00	1008.	324.	324.	2.78
+	2 COMBINED AT	C9F-2	5751.	18.42	4157.	1542.	1542.	14.83
+	ROUTED TO	R9G-1	5297.	19.83	4042.	1290.	1290.	14.83
+	HYDROGRAPH AT	VSD-5	911.	13.42	465.	143.	143.	1.23
+	2 COMBINED AT	C9H-1	5401.	19.83	4133.	1434.	1434.	16.06
+	ROUTED TO	R9H-2	4606.	22.00	3445.	1004.	1004.	16.06
+	HYDROGRAPH AT	VSD-6	1275.	15.42	960.	336.	336.	2.99
+	2 COMBINED AT	C9H-3	4956.	21.92	3907.	1341.	1341.	19.05
+	ROUTED TO	R9I-1	3586.	23.92	2059.	603.	603.	19.05
+	HYDROGRAPH AT	VSD-7	2747.	12.92	1050.	317.	317.	2.63
+	2 COMBINED AT	C9I-2	3693.	23.92	2215.	920.	920.	21.68

*** NORMAL END OF HEC-1 ***

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1**********************************************
 *  HEC-2 WATER SURFACE PROFILES              *
 *                                            *
 *  Version   4.6.2;  May 1991                *
 *                                            *
 *  RUN DATE    05FEB13    TIME    19:20:28   *
 **********************************************
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Higginbottom Creek
Existing Conditions

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****************************************
*  U.S. ARMY CORPS OF ENGINEERS        *
*  HYDROLOGIC ENGINEERING CENTER       *
*  609 SECOND STREET, SUITE D          *
*  DAVIS, CALIFORNIA 95616-4687        *
*        (916) 756-1104                *
****************************************
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X      X  XXXXXXX   XXXXX              XXXXX
X      X  X        X     X            X     X
X      X  X        X                        X
XXXXXXX   XXXX     X          XXXXX    XXXXX
X      X  X        X                  X
X      X  X        X     X            X
X      X  XXXXXXX   XXXXX             XXXXXXX
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THIS RUN EXECUTED 05FEB13   19:20:28

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*************************************
 HEC-2 WATER SURFACE PROFILES

 Version   4.6.2;  May 1991
*************************************
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T1 WHITEMAN'S CREEK FEASIBILITY STUDY
T2 HIGGINBOTTOM CREEK, EXISTING CONDITIONS
T3 1991 CONDITIONS, RSS APR 1991

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	2	0	0	0	0	0	0	244.73	

J2	NPROF	IPLOT	PRFVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1	0	-1							

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38	1	2	43	13	14	15	47	46	55
26	56	42	0	38	1	43	40	41	50
51	52	25	4	39	7				

NC	.09	.09	.055	.3	.5					
QT	9	1072	2113	2931	3476	4097	4709	5103	6378	8338

X1	100.19	59	12363	12440	1000	850	980			
GR	251.6	10000	251.5	10100	251.1	10200	250.9	10300	250.9	10400
GR	251.1	10500	250.7	10600	250.6	10700	250.1	10800	249.4	10900
GR	248.8	11000	248.9	11100	249.4	11200	249.1	11300	249.1	11400
GR	249.1	11500	248.6	11600	248.4	11700	247.9	11800	247.9	11900
GR	247.6	12000	247.5	12100	248.3	12200	247.6	12300	247.2	12363
GR	244.0	12377	242.5	12394	241.1	12400	238.8	12407	233.9	12412
GR	232.5	12417	231.9	12420	232.6	12424	233.9	12427	237.5	12430
GR	241.6	12436	246.7	12440	250.6	12447	250.4	12450	248.9	12457
GR	246.6	12461	246.9	12473	246.6	12482	247.0	12485	245.3	12487
GR	245.3	12489	248.5	12493	248.6	12500	248.4	12600	247.9	12700
GR	248.1	12800	248.0	12900	247.7	13000	247.6	13100	247.4	13200
GR	247.5	13300	247.1	13400	247	13500	248.4	14300		

X1	100.64	44	11851	12008	2011	2172	2376			
X3	10							256	255.6	
GR	256.0	9578	253.0	10100	253.0	10200	253.0	10300	253.1	10400
GR	252.9	10500	253.2	10600	252.7	10700	252.4	10800	252.1	10900
GR	252.6	11000	252.0	11100	253.4	11200	253.2	11300	252.8	11400
GR	253.0	11500	253.2	11600	253.1	11700	253.3	11800	254.4	11851
GR	249.5	11861	249.8	11877	243.4	11881	239.8	11891	239.4	11895
GR	239.5	11898	239.7	11900	240.1	11905	245.2	11922	246.6	11953
GR	247.5	11992	248.0	12000	251.1	12008	253.6	12100	253.7	12200
GR	253.6	12300	253.2	12400	252.4	12500	252.0	12600	251.8	12700
GR	251.8	12800	251.6	12900	251.7	13000	255.0	14228		

SB	.9	1.5	2.5	0	28.33	6.12	908.4	3.62	240.5	240.5
X1	100.64	0	0	0	10	10	10			
X2	0	0	1	253.5	255.5					
X3	10							256	255.6	
BT	10	9578	256.0	0	11000	256.0	0	11600	255.6	0
BT	11930	255.5	0	12000	255.6	0	12400	255.7	0	12600
BT	255.6	0	12700	255.6	0	12800	255.5	0	14228	255.0
BT	0									

X1	100.75				300.	450	581		.8	

X1	101.08	65	12043	12126	1650	1250	1742			
X3	10							258.9	256.45	
GR	260	9655	260	9656	260	9657	260	9658	260	9659
GR	258.2	10000	257.9	10100	257.8	10200	257.8	10300	258.0	10400

GR	257.8	10500	257.8	10600	257.7	10700	258.1	10800	258.2	10900
GR	258.3	11000	258.1	11100	258.0	11200	258.3	11300	258.3	11400
GR	258.0	11500	257.7	11600	258.4	11700	257.5	11800	256.8	11900
GR	257.9	12000	259.1	12043	255.6	12048	253.2	12054	251.9	12068
GR	248.2	12072	244.7	12077	242.3	12084	244.7	12091	246.8	12098
GR	250.6	12102	252.4	12113	254.8	12119	258.3	12126	258.0	12200
GR	258.3	12279	258.1	12300	258.1	12400	257.9	12500	257.7	12600
GR	256.9	12700	255.8	12800	255.8	12900	255.5	13000	255.2	13100
GR	255.4	13200	255.6	13300	254.6	13400	254.8	13500	254.6	13600
GR	255.6	13700	255.4	13800	255.5	13900	255.5	13955	256.3	14000
GR	260	14500	260	14501	260	14502	260	14503	260	14504
SB	.9	1.5	2.5	0	22.6	2.6	796.4	3.0	244.5	244.5
X1	101.09	0	0	0	44	44	44			
X2	0	0	1	257.8	256.7					
X3	10							259	256.90	
BT	15	9655	261.1	0	10400	260.6	0	10600	260.6	0
BT	10700	260.6	0	11200	259.3	0	11600	258.9	0	11900
BT	259.0	0	12050	259.5	0	12160	259.5	0	12200	259.1
BT	0	12600	258.6	0	13400	256.7	0	13500	256.7	0
BT	14000	257.7	0	14504	260	0				

X1	101.22				690	700	739		1.8	
NC			.06							
X1	101.78	88	11557	11613	2350	2100	2957			
X3	10							265.0	261.8	
GR	268.7	10000	267.1	10100	266.0	10120	266.0	10134	266.0	10136
GR	266.0	10144	266.0	10152	266.0	10200	265.4	10276	264.2	10300
GR	265.2	10400	265.3	10500	265.2	10600	264.8	10700	264.9	10800
GR	264.9	10900	265.0	11000	265.1	11100	265.4	11200	265.8	11300
GR	266.0	11319	266.0	11400	266.1	11500	265.3	11557	261.6	11569
GR	258.1	11581	254.7	11585	253.8	11591	253.0	11597	253.4	11600
GR	254.7	11603	257.7	11607	264.3	11613	264.2	11700	265.0	11800
GR	264.7	11900	264.5	12000	264.3	12100	263.8	12200	263.6	12300
GR	263.6	12400	263.5	12500	262.9	12600	263.2	12700	263.7	12764
GR	261.9	12766	261.9	12767	263.6	12770	264.2	12778	263.8	12786
GR	263.2	12788	263.1	12789	264.5	12792	263.1	12800	263.3	12900
GR	263.2	13000	262.8	13100	262.8	13200	262.7	13300	263.1	13400
GR	261.6	13500	261.7	13600	261.6	13700	262.3	13800	263.0	13900
GR	263.7	14000	264.5	14087	264.8	14100	265.3	14200	265.7	14300
GR	266.2	14400	267.4	14490	266.0	14492	266.3	14493	266.3	14495
GR	266.3	14502	266.0	14504	267.2	14507	266.7	14600	266.6	14700
GR	266.3	14800	266.6	14900	266.2	15000	266.4	15100	266.7	15200
GR	266.3	15300	265.9	15400	270.0	16251				
SB	.90	1.5	2.0	0	11.83	1.74	321.6	1.91	253.5	253.5
X1	101.79	0	0	0	23	23	23			
X2	0	0	1	264.1	262.0					
X3	10							265.0	262	
BT	25	10000	268.6	0	10100	267.5	0	10360	265.0	0
BT	11000	265.0	0	11300	266.0	0	11500	266.1	0	11560
BT	265.5	0	11620	265.5	0	11700	264.3	0	11800	265.0
BT	0	12600	263.0	0	12800	266.0	0	13300	262.7	0
BT	13400	263.1	0	13450	262.2	0	13760	262.1	0	14140
BT	265.0	0	14340	266.0	0	14400	266.6	0	14430	267.6
BT	0	14600	266.7	0	15000	266.3	0	15200	266.7	0
BT	15400	266.0	0	16251	270.0	0				
QT	9	852	1687	2419	2874	3366	3849	4160	5104	6170
X1	101.9				634	634	634		1.6	
X1	102.32	55	12500	12600	2200	2200	2218			
GR	290.3	10000	287.9	10100	285.5	10200	284.2	10300	283.1	10400
GR	281.3	10500	279.5	10600	278.4	10700	277.3	10800	275.9	10900
GR	274.8	11000	274.8	11016	276.4	11026	278.5	11066	277.3	11100
GR	275.5	11167	273.0	11181	273.4	11200	273.1	11226	271.4	11300
GR	271.8	11400	272.2	11421	272.1	11427	272.1	11430	272.1	11432
GR	272.1	11440	271.3	11500	270.6	11600	269.9	11700	269.9	11800
GR	269.8	11900	270.1	12000	270.4	12100	270.1	12200	270.4	12300
GR	270.4	12400	270.8	12500	269.2	12541	264.8	12547	260.1	12555
GR	257.6	12558	257.9	12561	258.4	12564	260.1	12567	265.0	12584
GR	269.2	12593	271.4	12600	271.0	12700	271.0	12800	270.8	12900
GR	271.2	13000	274.5	13100	279.6	13200	283.3	13300	287.8	13400

X1	102.60	0	0	0	1478	1478	1478	0	3.7	
X1	102.90	66	11055	11098	1185	1347	1585	0	-1.2	
GR	301.9	10000	296.8	10100	292.2	10200	288.5	10300	286.4	10400
GR	283.7	10500	283.6	10600	284.6	10652	283.2	10700	279.6	10800
GR	280.3	10900	280.3	10910	278.2	11000	277.3	11055	273.2	11061
GR	270.7	11063	267.2	11071	266.5	11076	267.2	11079	270.5	11085
GR	274.3	11091	276.3	11093	279.0	11098	278.2	11200	277.3	11300
GR	278.0	11400	278.0	11406	278.0	11414	278.0	11422	278.0	11430
GR	278.0	11431	278.0	11433	278.0	11437	278.0	11446	278.3	11458
GR	277.8	11500	277.5	11600	277.8	11700	277.7	11800	277.8	11900
GR	277.8	12000	278.2	12020	279.3	12165	279.0	12200	281.6	12300
GR	278.1	12400	277.3	12500	277.3	12600	277.4	12700	276.7	12800
GR	276.9	12900	277.6	12916	277.5	12923	277.5	12928	277.5	12934
GR	277.5	12937	277.5	12944	277.5	12954	277.3	13000	279.3	13100
GR	279.5	13107	281.0	13200	285.2	13300	285.5	13319	290.1	13400
GR	294.1	13500								
NC	.09	.09	.06	.3	.5					
X1	102.93	14	10000	10120	175	75	150			
GR	300	8750	290	8900	280	9550	276.4	10000	276.1	10051
GR	268.6	10065	263.9	10078	263.3	10082	264.3	10083	269.5	10105

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GR    276.8      10120        280      10870        290      11770        300      11945

X1   102.95          0          0          0        100        180        100
X3       10          0          0          0          0          0          0      279.0      277.6

SB     1.25       1.56        2.5          0         44       0.01        484          0      264.4      264.3
X1   102.96          0          0          0         70         70         70
X2        0          0          1      274.4      279.4
X3       10          0          0          0          0          0          0      279.9      278.2
BT       -5       8200      279.9          0       8500      280.1          0       8900      281.0          0
BT                9000      281.4          0      10189      278.2

X1   102.97         14      10050      10190        200        200        100
GR      300       8800        290       9000        280       9500      278.1      10000      275.8      10050
GR    269.9      10071      264.8      10091      264.5      10128      265.3      10166      269.8      10167
GR    277.7      10190        280      10690        290      11790        300      11990

X1   102.98          0          0          0         50         50         50
X3       10          0          0          0          0          0          0      279.4      278.0

SB     1.25       1.56        2.5          0         30       0.01        300          0      265.0      264.7
X1   102.99          0          0          0        134        134        134
X2        0          0          1      274.1      278.5
X3       10          0          0          0          0          0          0      280.4      278.5
BT       -7       9475      284.6          0       9550      283.0          0       9600      282.2          0
BT                9700      281.5          0       9850      280.4          0       9900      279.5          0
BT               10300      278.5
1
    05FEB13      19:20:28                                                                                PAGE     5


X1   103.00         15      10050      10152        100        100        100
GR      300       8800        290       9000        280       9700      277.9      10000      275.5      10050
GR    269.3      10069      265.4      10080      266.0      10097      265.7      10115      272.6      10136
GR    277.6      10152      281.2      10172        280      10622        290      11622        300      11822

X1   103.01          0          0          0        100        100        100
X3       10          0          0          0          0          0          0      279.6      279.6

SB     1.25       1.56        2.5          0         27       0.01        243          0      265.9      265.9
X1   103.02          0          0          0        132        132        132
X2        0          0          1      275.4      281.9
X3       10          0          0          0          0          0          0      282.0      281.9
BT       -4       9600      286.8          0       9750      283.0          0       9950      282.0          0
BT               11100      281.9          0

X1   103.03         14      10100      10157        100        100        100
GR      300       8900        290       9125        280       9575      277.5      10000      278.0      10100
GR    266.2      10135      264.1      10138      266.1      10142      278.6      10157      277.7      10207
GR    277.8      10257        280      10707        290      11707        300      11957

NC      .09        .09       .055
QT        9        640       1165       1531       1742       1985       2198       2378       2857       2776
X1   103.04         12        230        266        250        400        200
GR    282.0          0      280.0        200        278        230      272.6        232      268.5        247
GR    267.7        250      268.5        254      272.5        258      278.0        266      280.0        860
GR    282.0        960      284.0       1540

NH        4        .09      10525       .055      10565        .09      10950        500      11700
X1   103.19         20      10525      10565        350        750        792
GR    279.6      10000      279.0      10200      279.2      10400      279.6      10500      280.5      10525
GR    279.3      10526      276.5      10535      271.5      10544      271.3      10547      271.5      10552
GR    280.5      10565      279.5      10600      279.4      10700      280.0      10850      280.4      10950
GR    281.3      11100      284.2      11250      286.3      11400      290.7      11550      295.5      11700

NH        5        500      10200        .09      10517       .055      10551        .09      11000        500
NH    11700
X1   103.23         27      10517      10551        211        211        211
X3       10                                                                      281.3      281.3
GR    292.4      10000      288.3      10100      285.3      10200      281.4      10300      281.0      10400
GR    280.7      10500      280.1      10517      276.3      10525      273.0      10533      272.9      10538
GR    272.9      10540      272.8      10543      273.0      10546      276.5      10549      279.6      10551
GR    279.4      10600      280.3      10700      280.7      10800      280.2      10900      280.4      11000
GR    280.6      11100      281.6      11200      283.7      11300      286.5      11400      291.2      11500
GR    295.5      11600      300.0      11700

SB       .9        1.5        3.0          0         27        .01        162          0      271.8      271.8
X1   103.24          0          0          0        180        180        180
X2        0          0          1      277.8      284.7
X3       10                                                                      284.6      284.8
BT       12      10000      292.4          0      10050      290.4          0      10100      288.4          0
BT    10225      284.5          0      10500      284.8          0      10600      284.7          0      10900
BT    285.1          0      11000      285.5          0      11100      286.4          0      11200      287.8
BT        0      11610      296.0          0      11700        300          0
1
    05FEB13      19:20:28                                                                                PAGE     6


NC      .09        .09       .055
X1   103.4          16        480        548       1020        700        898
GR      292          0        290        170        288        240        286        340        284        415
GR      282        480      279.5        491      276.2        508      275.9        530        282        548
GR      282        560        284        640        286        810        288        940        290       1060
GR      292       1160

NC      .09        .09       .055
X1   103.69         35      11708      11791       1600       1350       1531
GR    306.6      10690      296.5      10890      297.3      10990      290.3      11090      289.7      11144
GR    288.4      11200      288.4      11300      288.5      11400      289.1      11500      288.7      11600
GR    289.1      11700      289.2      11708      285.9      11724      282.1      11733      281.3      11743
GR    281.0      11749      281.3      11756      281.6      11762      285.1      11772      288.8      11791
GR    288.4      11800      288.3      11900      288.1      11975      288.2      12000      288.2      12100
GR    288.1      12200      288.1      12300      291.0      12400      297.0      12500      298.6      12600
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GR    298.2      12700      298.5      12800      302.6      12900      304.2      12979      306.1      13000

SB       .9        1.5        1.7          0         28        .01        183        .15        281        281
X1    103.70          0          0          0         35         35         35
X2         0          0          1      287.3      288.0
BT        24      10690      306.6          0      10691      306.6          0      10692      306.6          0
BT     10890      296.5          0      10990      297.3          0      11090      290.3          0      11142
BT     290.5          0      11142      290.5          0      11142      290.5          0      11142      290.5
BT         0      11200        289          0      11300      287.5          0      11500      289.1          0
BT     11600      288.6          0      11700      289.1          0      11980      288.0          0      12300
BT     288.0          0      12400      291.0          0      12500      297.0          0      12600      298.5
BT         0      12800      298.5          0      12900      302.5          0      12980      304.2          0
BT     13000      306.1          0

NC       .09        .09        .05
X1    103.85         34      10747      10821          1       1045        845
GR     306.5      10000      301.4      10100      296.5      10200      297.3      10300      290.2      10400
GR     289.6      10455      289.9      10500      289.1      10600      289.3      10700      289.7      10747
GR     286.3      10757      282.5      10765      282.2      10772      282.5      10777      283.0      10784
GR     283.1      10788      285.4      10800      290.2      10821      290.7      10900      291.1      11000
GR     290.9      11038      292.3      11100      293.6      11200      297.4      11300      298.0      11334
GR     298.6      11400      299.1      11500      299.7      11600      300.9      11700      301.9      11800
GR     302.3      11900      301.9      11932      304.0      12000      305.3      12071

SB       .9        1.5        2.5          0         28        .01        153        .05        282        282
X1    103.86          0          0          0         35         35         35
X2         0          0          1      287.4      289.1
BT        23      10000      306.5          0      10200      296.5          0      10300      297.3          0
BT     10400      290.2          0      10455      289.6          0      10500      289.9          0      10600
BT     289.1          0      10700      289.3          0      10745      289.4          0      10820      290.2
BT         0      10900      290.7          0      11000      291.1          0      11080      291.0          0
BT     11100      294.8          0      11200      293.6          0      11300      297.5          0      11400
BT     298.5          0      11500      299.1          0      11600      299.7          0      11800      301.9
BT         0      11930        302          0      12000      304.0          0      12070      305.2          0
1
    05FEB13      19:20:28                                                                                  PAGE    7


QT         9        377        718        950       1102       1301       1477       1627       1984       1897
X1    103.92         16        740        805        430        390        370
GR       300          0        298         80        296        130        294        230        292        355
GR     290.8        545      290.6        740        284        762        284        778      284.7        786
GR     291.0        805        292       1135        294       1145        296       1155        298       1160
GR     300.0       1170

X1     104.0         15        610        661        400        400        422
GR       300          0        298        160        296        250        294        430        292        510
GR       292        610      286.4        625      286.0        630      287.0        645        292        661
GR       292        701        294        986        296       1021        298       1061        300       1101

NC       .1         .1        .05
X1    104.13         47      11887      11911        630        550        686
X3        10                                                                 296        296
GR     311.2      10000      308.0      10100      309.4      10200      308.8      10300      308.8      10313
GR     305.8      10320      301.9      10325      301.8      10327      301.9      10329      305.4      10332
GR     308.3      10338      308.8      10400      307.5      10500      305.8      10600      303.8      10700
GR     303.8      10721      304.3      10800      304.8      10900      303.6      11000      302.8      11100
GR     300.9      11200      300.0      11300      299.6      11400      299.0      11500      298.5      11600
GR     297.3      11700      296.8      11800      295.8      11887      292.3      11892      290.0      11900
GR     288.9      11902      288.8      11904      289.2      11907      290.0      11909      291.8      11911
GR     294.7      11913      295.8      12000      296.7      12100      298.0      12200      298.1      12276
GR     299.6      12300      301.2      12400      301.8      12500      302.9      12600      305.0      12700
GR     309.0      12800      310.9      12900

SB       .9        1.5        2.5          0         20        .01         80          0        290        290
X1    104.14          0          0          0         33         33         33
X2         0          0          1      294.0      296.5
X3        10                                                                 297      296.5
BT        21      10000      311.0          0      10200      309.8          0      10300      309.5          0
BT     10600      307.2          0      10720      306.4          0      10820      305.4          0      11100
BT     303.2          0      11300      301.0          0      11500      299.8          0      11700      298.1
BT         0      11905      296.7          0      12000      296.5          0      12110      297.0          0
BT     12200      298.0          0      12280      298.3          0      12300      299.7          0      12400
BT     301.3          0      12500      302.0          0      12735      306.5          0      12800      309.0
BT         0      12900      311.0          0

X1    104.21         28      11120      11140        400        400        422
GR     317.1      10000      313.6      10100      311.5      10166      310.6      10200      308.0      10300
GR     305.2      10343      304.6      10400      304.3      10420      303.3      10500      301.3      10600
GR     300.9      10623      298.4      10700      296.7      10800      296.5      10869      296.3      10900
GR     296.9      11000      297.3      11100      297.9      11120      295.9      11124      291.0      11125
GR     290.9      11127      291.1      11129      295.1      11134      297.5      11140      298.2      11200
GR     302.8      11300      308.4      11400      312.8      11453

SB       .9        1.5        2.5          0       4.71        .01      23.55          0      291.4      291.4
X1    104.22          0          0          0         34         34         34
X2         0          0          1      296.4      296.4
BT        21      10000      317.4          0      10100      313.6          0      10300      308.1          0
BT     10315      307.0          0      10345      306.3          0      10385      304.9          0      10500
BT     303.3          0      10623      301.0          0      10693      298.6          0      10800      297.2
BT         0      10905      296.4          0      11100      297.3          0      11120      298.0          0
1
    05FEB13      19:20:28                                                                                  PAGE    8


BT     11122      296.8          0      11138      296.9          0      11140      297.5          0      11175
BT     298.0          0      11200      298.6          0      11307      303.2          0      11400      308.5
BT         0      11453      312.8          0

X1    104.27         13        515        526        320        340        343
GR     306.0          0        304         40        302        125        300        230        298        335
GR     297.7        515      293.3        518      293.3        520      294.0        522      298.0        526
GR       300        550        302        625        304        700
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X1   104.34       18      10493      10508        290        360        343
GR     309.4    10000      306.5      10100      302.3      10200      300.4      10300      299.6      10400
GR     299.6    10493      297.2      10498      295.8      10500      295.4      10503      295.7      10505
GR     297.6    10506      299.6      10508      300.4      10600      301.8      10672      302.2      10700
GR     306.3    10800      312.7      10900      315.3      10967

SB        .9      1.5        2.3          0        8.5        .01      21.25          0      295.9      295.9
X1    104.35        0          0          0         34         34         34
X2         0        0          1      298.4      299.7
BT        13    10000      309.4          0      10100      306.5          0      10200      302.3          0
BT     10300    300.6          0      10350      300.0          0      10500      299.7          0      10600
BT     300.6        0      10675      302.2          0      10700      303.0          0      10800      308.0
BT         0    10875      311.3          0      10900      312.8          0      10967      315.5          0
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THIS RUN EXECUTED 05FEB13 19:20:28

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**************************************
 HEC-2 WATER SURFACE PROFILES

 Version  4.6.2;  May 1991
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NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

1991 CONDITIONS, RSS

SUMMARY PRINTOUT

	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	100.190	244.73	.00	1072.00	.00	1072.00	.00	.00	.00	.00	2.97	.00	231.90
	100.190	247.13	.00	2113.00	.00	2101.64	11.36	.00	.00	.00	3.96	.38	231.90
	100.190	247.80	.00	2931.00	21.51	2694.61	214.87	.00	.00	.33	4.63	.50	231.90
	100.190	248.09	.00	3476.00	88.00	2914.43	473.57	.00	.00	.46	4.82	.61	231.90
	100.190	248.36	.00	4097.00	205.53	3055.86	835.62	.00	.00	.58	4.89	.69	231.90
	100.190	248.58	.00	4709.00	341.98	3130.83	1236.19	.00	.00	.67	4.87	.77	231.90
	100.190	248.69	.00	5103.00	427.02	3196.68	1479.29	.00	.00	.72	4.91	.82	231.90
	100.190	249.04	.00	6378.00	745.77	3316.59	2315.65	.00	.00	.82	4.89	.94	231.90
	100.190	249.58	.00	8338.00	1411.51	3303.89	3622.60	.00	.00	.86	4.59	1.05	231.90
	100.640	248.41	.00	1072.00	.00	1072.00	.00	.00	.00	.00	2.48	.00	239.40
	100.640	250.87	.00	2113.00	.00	2113.00	.00	.00	.00	.00	2.75	.00	239.40
	100.640	251.96	.00	2931.00	.00	2931.00	.00	.00	.00	.00	3.15	.00	239.40
	100.640	252.46	.00	3476.00	.00	3476.00	.00	.00	.00	.00	3.45	.00	239.40
	100.640	252.89	.00	4097.00	.00	4097.00	.00	.00	.00	.00	3.82	.00	239.40
	100.640	253.23	.00	4709.00	.00	4709.00	.00	.00	.00	.00	4.19	.00	239.40
	100.640	253.46	.00	5103.00	.00	5103.00	.00	.00	.00	.00	4.40	.00	239.40
	100.640	254.06	.00	6378.00	.00	6378.00	.00	.00	.00	.00	5.09	.00	239.40
	100.640	254.60	.00	8338.00	.00	8338.00	.00	.00	.00	.00	6.23	.00	239.40
	100.640	248.42	.00	1072.00	.00	1072.00	.00	1072.00	.00	.00	2.47	.00	239.40
	100.640	250.88	.00	2113.00	.00	2113.00	.00	2113.00	.00	.00	2.75	.00	239.40
	100.640	251.97	.00	2931.00	.00	2931.00	.00	2931.00	.00	.00	3.14	.00	239.40
	100.640	252.47	.00	3476.00	.00	3476.00	.00	3476.00	.00	.00	3.45	.00	239.40
	100.640	252.90	.00	4097.00	.00	4097.00	.00	4097.00	.00	.00	3.81	.00	239.40
	100.640	253.61	.00	4709.00	.00	4709.00	.00	4709.00	.00	.00	3.98	.00	239.40
	100.640	253.93	.00	5103.00	.00	5103.00	.00	5103.00	.00	.00	4.14	.00	239.40
	100.640	254.88	.00	6378.00	.00	6378.00	.00	6378.00	.00	.00	4.61	.00	239.40
*	100.640	255.76	.00	8338.00	.00	3886.05	4451.95	6545.91	1810.75	.00	2.55	.72	239.40

	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	100.750	249.33	.00	1072.00	.00	1072.00	.00	.00	.00	.00	2.40	.00	240.20
	100.750	251.61	.00	2113.00	.00	2113.00	.00	.00	.00	.00	2.79	.00	240.20
	100.750	252.72	.00	2931.00	.00	2912.66	18.34	.00	.00	.00	3.15	.22	240.20
	100.750	253.26	.00	3476.00	12.69	3277.65	185.66	.00	.00	.21	3.25	.41	240.20
	100.750	253.76	.00	4097.00	109.92	3492.40	494.68	.00	.00	.38	3.22	.53	240.20
*	100.750	254.39	.00	4709.00	489.67	3269.64	949.69	.00	.00	.39	2.77	.54	240.20
*	100.750	254.69	.00	5103.00	766.54	3136.49	1199.97	.00	.00	.42	2.55	.53	240.20
*	100.750	255.60	.00	6378.00	1633.46	2770.38	1974.16	.00	.00	.45	2.02	.49	240.20
	100.750	255.98	.00	8338.00	2380.64	3173.44	2783.92	.00	.00	.54	2.22	.57	240.20
*	101.080	252.94	.00	1072.00	.00	1072.00	.00	.00	.00	.00	4.03	.00	242.30
*	101.080	255.11	.00	2113.00	.00	2113.00	.00	.00	.00	.00	5.20	.00	242.30
*	101.080	256.30	.00	2931.00	.00	2931.00	.00	.00	.00	.00	5.94	.00	242.30
*	101.080	256.40	253.23	3476.00	.00	3476.00	.00	.00	.00	.00	6.94	.00	242.30
*	101.080	256.51	.00	4097.00	.00	2553.44	1543.56	.00	.00	.00	5.02	1.06	242.30
*	101.080	256.55	.00	4709.00	.00	2882.98	1826.01	.00	.00	.00	5.63	1.21	242.30
*	101.080	256.57	.00	5103.00	.00	3097.62	2005.38	.00	.00	.00	6.03	1.31	242.30
*	101.080	256.72	.00	6378.00	.00	3638.89	2739.11	.00	.00	.00	6.93	1.58	242.30
*	101.080	257.23	.00	8338.00	.00	3897.32	4440.68	.00	.00	.00	6.91	1.82	242.30
	101.090	252.96	.00	1072.00	.00	1072.00	.00	1072.00	.00	.00	4.02	.00	242.30
	101.090	255.13	.00	2113.00	.00	2113.00	.00	2113.00	.00	.00	5.18	.00	242.30
*	101.090	256.35	.00	2931.00	.00	2931.00	.00	3785.53	34.66	.00	5.89	.00	242.30
	101.090	256.40	.00	3476.00	.00	3476.00	.00	3478.48	29.52	.00	6.93	.00	242.30
	101.090	257.00	.00	4097.00	.00	2089.47	2007.53	3970.90	160.71	.00	3.82	.95	242.30
*	101.090	257.16	.00	4709.00	.00	2253.55	2455.45	4359.24	332.11	.00	4.03	1.05	242.30
*	101.090	257.26	.00	5103.00	.00	2351.01	2751.99	4602.20	474.14	.00	4.15	1.10	242.30

*	101.090	257.60	.00	6378.00	.00	2606.36	3771.64	5194.00	1164.47	.00	4.39	1.25	242.30
*	101.090	258.13	.00	8338.00	.00	2869.79	5468.21	5297.71	3029.42	.00	4.51	1.40	242.30
	101.220	255.17	.00	1072.00	.00	1072.00	.00	.00	.00	.00	3.68	.00	244.10
	101.220	257.52	.00	2113.00	.00	1819.65	293.35	.00	.00	.00	4.04	.58	244.10
*	101.220	258.48	.00	2931.00	.00	1701.08	1229.92	.00	.00	.00	3.26	.73	244.10
*	101.220	258.85	.00	3476.00	1.06	1733.30	1741.64	.00	.00	.14	3.15	.79	244.10
	101.220	258.44	.00	4097.00	.00	2418.46	1678.54	.00	.00	.00	4.66	1.04	244.10
	101.220	258.68	.00	4709.00	.04	2531.84	2177.12	.00	.00	.09	4.72	1.13	244.10
	101.220	258.81	.00	5103.00	.94	2591.19	2510.87	.00	.00	.18	4.74	1.18	244.10
	101.220	259.20	.00	6378.00	15.88	2786.06	3576.06	.00	.00	.37	4.82	1.32	244.10
	101.220	259.71	.00	8338.00	98.53	3040.80	5198.67	.00	.00	.47	4.92	1.48	244.10
	101.780	262.53	.00	1072.00	.00	892.91	179.09	.00	.00	.00	3.55	.67	253.00
	101.780	263.56	.00	2113.00	.00	1068.31	1044.69	.00	.00	.00	3.55	.85	253.00
*	101.780	263.62	.00	2931.00	.00	1426.82	1504.18	.00	.00	.00	4.70	1.14	253.00
*	101.780	263.74	.00	3476.00	.00	1568.03	1907.97	.00	.00	.00	5.06	1.25	253.00
	101.780	264.36	.00	4097.00	.00	1242.03	2854.97	.00	.00	.00	3.63	1.05	253.00
	101.780	264.53	.00	4709.00	.00	1296.64	3412.36	.00	.00	.00	3.69	1.10	253.00
	101.780	264.63	.00	5103.00	.00	1334.86	3768.14	.00	.00	.00	3.75	1.14	253.00
	101.780	264.92	.00	6378.00	.00	1433.13	4944.87	.00	.00	.00	3.85	1.24	253.00
	101.780	265.29	.00	8338.00	107.10	1555.81	6675.10	.00	.00	.42	3.96	1.35	253.00

	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	101.790	262.53	.00	1072.00	.00	891.78	180.22	793.44	280.40	.00	3.54	.67	253.00
	101.790	263.56	.00	2113.00	.00	1070.28	1042.72	622.25	1486.48	.00	3.56	.85	253.00
	101.790	263.62	.00	2931.00	.00	1420.35	1510.65	895.46	2052.12	.00	4.67	1.13	253.00
*	101.790	263.74	.00	3476.00	.00	1556.17	1919.83	990.64	2515.29	.00	5.02	1.25	253.00
*	101.790	264.36	.00	4097.00	.00	1245.84	2851.16	547.25	3552.38	.00	3.64	1.05	253.00
*	101.790	264.53	.00	4709.00	.00	1300.54	3408.46	551.69	4161.25	.00	3.70	1.11	253.00
*	101.790	264.63	.00	5103.00	.00	1335.32	3767.68	556.58	4555.47	.00	3.75	1.14	253.00
*	101.790	264.92	.00	6378.00	.00	1436.95	4941.04	564.80	5814.82	.00	3.86	1.24	253.00
	101.790	265.29	.00	8338.00	106.99	1556.02	6674.99	543.77	7789.66	.42	3.96	1.35	253.00
	101.900	263.94	.00	852.00	.00	752.71	99.29	.00	.00	.00	3.09	.51	254.60
	101.900	264.91	.00	1687.00	.00	994.72	692.28	.00	.00	.00	3.44	.78	254.60
	101.900	265.41	.00	2419.00	.00	1036.02	1382.98	.00	.00	.00	3.30	.83	254.60
	101.900	265.63	.00	2874.00	.00	1070.70	1803.30	.00	.00	.00	3.30	.88	254.60
	101.900	265.70	.00	3366.00	.00	1196.38	2169.62	.00	.00	.00	3.64	.99	254.60
	101.900	265.88	.00	3849.00	.02	1233.89	2615.09	.00	.00	.07	3.66	1.04	254.60
	101.900	265.98	.00	4160.00	.29	1252.74	2906.97	.00	.00	.15	3.65	1.06	254.60
	101.900	266.26	.00	5104.00	3.78	1305.35	3794.87	.00	.00	.28	3.64	1.12	254.60
	101.900	266.60	.00	6170.00	20.11	1333.60	4816.28	.00	.00	.28	3.54	1.15	254.60
	102.320	268.06	.00	852.00	.00	852.00	.00	.00	.00	.00	3.15	.00	257.60
	102.320	270.47	.00	1687.00	139.75	1547.25	.00	.00	.00	.53	3.71	.00	257.60
	102.320	270.92	.00	2419.00	564.60	1853.62	.78	.00	.00	.85	4.04	.15	257.60
*	102.320	271.12	.00	2874.00	848.21	2010.69	15.10	.00	.00	.99	4.20	.31	257.60
	102.320	271.42	.00	3366.00	1247.53	2033.92	84.55	.00	.00	1.08	3.99	.53	257.60
	102.320	271.58	.00	3849.00	1549.35	2151.09	148.56	.00	.00	1.16	4.09	.65	257.60
	102.320	271.67	.00	4160.00	1737.92	2231.38	190.70	.00	.00	1.21	4.17	.72	257.60
	102.320	271.91	.00	5104.00	2316.73	2457.16	330.11	.00	.00	1.35	4.39	.90	257.60
	102.320	272.13	.00	6170.00	2958.20	2723.23	488.57	.00	.00	1.51	4.69	1.07	257.60
	102.600	271.18	.00	852.00	.00	852.00	.00	.00	.00	.00	3.50	.00	261.30
	102.600	274.46	.00	1687.00	302.57	1384.43	.00	.00	.00	.59	3.12	.00	261.30
	102.600	275.00	.00	2419.00	826.22	1554.95	37.83	.00	.00	.80	3.13	.34	261.30
	102.600	275.22	.00	2874.00	1121.21	1657.76	95.03	.00	.00	.89	3.19	.47	261.30
	102.600	275.37	.00	3366.00	1400.12	1814.55	151.33	.00	.00	.99	3.40	.58	261.30
	102.600	275.54	.00	3849.00	1705.63	1916.82	226.55	.00	.00	1.05	3.48	.68	261.30
	102.600	275.65	.00	4160.00	1904.52	1977.44	278.04	.00	.00	1.09	3.52	.73	261.30
	102.600	275.96	.00	5104.00	2515.02	2144.84	444.14	.00	.00	1.19	3.62	.87	261.30
	102.600	276.27	.00	6170.00	3216.49	2307.82	645.69	.00	.00	1.28	3.70	1.00	261.30
	102.900	275.19	.00	852.00	.00	852.00	.00	.00	.00	.00	3.81	.00	265.30
	102.900	277.18	.00	1687.00	15.82	963.95	707.22	.00	.00	.45	3.19	.59	265.30
	102.900	277.55	.00	2419.00	37.10	1063.30	1318.60	.00	.00	.60	3.34	.73	265.30
	102.900	277.74	.00	2874.00	52.00	1112.24	1709.75	.00	.00	.67	3.41	.80	265.30
	102.900	277.95	.00	3366.00	69.89	1148.13	2147.98	.00	.00	.72	3.42	.86	265.30
	102.900	278.12	.00	3849.00	87.25	1197.06	2564.69	.00	.00	.77	3.49	.91	265.30
	102.900	278.22	.00	4160.00	98.88	1223.56	2837.56	.00	.00	.79	3.52	.95	265.30
	102.900	278.51	.00	5104.00	135.51	1305.13	3663.35	.00	.00	.86	3.63	1.04	265.30
	102.900	278.79	.00	6170.00	182.05	1390.42	4597.53	.00	.00	.89	3.74	1.13	265.30

	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
*	102.930	275.55	.00	852.00	.00	852.00	.00	.00	.00	.00	1.88	.00	263.30
	102.930	277.35	.00	1687.00	20.57	1657.40	9.03	.00	.00	.36	2.62	.25	263.30
	102.930	277.73	.00	2419.00	62.10	2312.10	44.80	.00	.00	.56	3.41	.44	263.30
	102.930	277.91	.00	2874.00	97.20	2696.40	80.41	.00	.00	.68	3.85	.55	263.30
	102.930	278.11	.00	3366.00	145.54	3086.43	134.03	.00	.00	.80	4.27	.67	263.30
*	102.930	278.27	.00	3849.00	198.18	3455.26	195.56	.00	.00	.91	4.66	.77	263.30
*	102.930	278.37	.00	4160.00	235.56	3683.59	240.85	.00	.00	.97	4.89	.84	263.30
*	102.930	278.63	.00	5104.00	362.24	4340.90	400.86	.00	.00	1.17	5.53	1.02	263.30
*	102.930	278.89	.00	6170.00	527.93	5021.31	620.75	.00	.00	1.36	6.15	1.21	263.30
	102.950	275.60	.00	852.00	.00	852.00	.00	.00	.00	.00	1.87	.00	263.30
	102.950	277.48	.00	1687.00	.00	1687.00	.00	.00	.00	.00	2.61	.00	263.30
	102.950	277.93	.00	2419.00	.00	2346.60	72.40	.00	.00	.00	3.35	.48	263.30
	102.950	278.16	.00	2874.00	.00	2742.62	131.38	.00	.00	.00	3.76	.60	263.30
	102.950	278.40	.00	3366.00	.00	3151.87	214.13	.00	.00	.00	4.16	.72	263.30
	102.950	278.61	.00	3849.00	.00	3530.15	318.84	.00	.00	.00	4.51	.83	263.30
	102.950	278.74	.00	4160.00	.00	3765.47	394.53	.00	.00	.00	4.72	.90	263.30
	102.950	279.18	.00	5104.00	519.92	3939.22	644.86	.00	.00	1.07	4.62	.97	263.30
	102.950	279.57	.00	6170.00	757.13	4421.33	991.54	.00	.00	1.20	4.92	1.10	263.30

	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	102.960	275.62	.00	852.00	.00	852.00	.00	852.00	.00	.00	1.86	.00	263.30
	102.960	277.68	.00	1687.00	.00	1687.00	.00	1687.00	.00	.00	2.51	.00	263.30
	102.960	278.41	.00	2419.00	.00	2262.61	156.39	2419.00	.00	.00	2.98	.52	263.30
	102.960	278.88	.00	2874.00	.00	2561.38	312.62	2874.00	.00	.00	3.14	.62	263.30
	102.960	279.15	.00	3366.00	.00	2903.90	462.10	2966.77	428.27	.00	3.42	.71	263.30
	102.960	279.43	.00	3849.00	.00	3207.79	641.21	3089.95	759.31	.00	3.64	.79	263.30
	102.960	279.58	.00	4160.00	.00	3394.37	765.63	3153.06	1007.65	.00	3.77	.84	263.30
*	102.960	280.09	.00	5104.00	763.70	3283.68	1056.62	3153.06	1961.81	.90	3.42	.83	263.30
*	102.960	280.41	.00	6170.00	1036.14	3659.16	1474.70	3063.48	3108.70	1.03	3.66	.97	263.30
*	102.970	275.69	.00	852.00	.00	852.00	.00	.00	.00	.00	.77	.00	264.50
*	102.970	277.80	.00	1687.00	7.78	1679.19	.03	.00	.00	.18	1.21	.02	264.50
*	102.970	278.56	.00	2419.00	27.31	2381.27	10.42	.00	.00	.25	1.59	.13	264.50
*	102.970	279.04	.00	2874.00	58.90	2778.51	36.59	.00	.00	.27	1.77	.19	264.50
*	102.970	279.34	.00	3366.00	96.81	3200.41	68.78	.00	.00	.30	1.99	.24	264.50
*	102.970	279.63	.00	3849.00	148.44	3586.88	113.68	.00	.00	.34	2.18	.28	264.50
*	102.970	279.80	.00	4160.00	187.58	3824.49	147.93	.00	.00	.36	2.29	.31	264.50
*	102.970	280.21	.00	5104.00	333.30	4491.92	278.78	.00	.00	.45	2.60	.41	264.50
*	102.970	280.53	.00	6170.00	514.27	5211.65	444.08	.00	.00	.55	2.93	.52	264.50
	102.980	275.70	.00	852.00	.00	852.00	.00	.00	.00	.00	.77	.00	264.50
	102.980	277.81	.00	1687.00	.00	1687.00	.00	.00	.00	.00	1.21	.00	264.50
	102.980	278.57	.00	2419.00	.00	2408.19	10.81	.00	.00	.00	1.60	.13	264.50
	102.980	279.05	.00	2874.00	.00	2835.99	38.01	.00	.00	.00	1.81	.19	264.50
	102.980	279.35	.00	3366.00	.00	3294.05	71.95	.00	.00	.00	2.05	.24	264.50
	102.980	279.64	.00	3849.00	150.71	3582.51	115.78	.00	.00	.34	2.17	.28	264.50
	102.980	279.81	.00	4160.00	190.47	3818.93	150.60	.00	.00	.36	2.28	.31	264.50
	102.980	280.23	.00	5104.00	339.33	4480.10	284.57	.00	.00	.45	2.58	.41	264.50
	102.980	280.56	.00	6170.00	527.14	5186.35	456.51	.00	.00	.55	2.91	.52	264.50

	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	102.990	275.88	.00	852.00	.00	852.00	.00	852.00	.00	.00	.75	.00	264.50
	102.990	278.55	.00	1687.00	.00	1679.79	7.21	1681.71	.42	.00	1.12	.09	264.50
	102.990	279.57	.00	2419.00	.00	2350.05	68.95	1950.63	461.86	.00	1.43	.18	264.50
	102.990	279.96	.00	2874.00	.00	2747.04	126.96	1874.09	1005.71	.00	1.62	.23	264.50
	102.990	280.24	.00	3366.00	.00	3162.58	203.42	1869.54	1496.68	.00	1.82	.29	264.50
	102.990	280.51	.00	3849.00	316.53	3259.58	272.89	1844.63	2007.04	.35	1.84	.32	264.50
	102.990	280.67	.00	4160.00	377.49	3453.34	329.17	1830.94	2335.67	.38	1.92	.35	264.50
	102.990	281.07	.00	5104.00	576.36	4012.92	514.72	1826.22	3323.35	.46	2.17	.44	264.50
	102.990	281.42	.00	6170.00	808.99	4626.51	734.50	1857.13	4317.16	.55	2.44	.53	264.50
*	103.000	275.89	.00	852.00	.13	851.87	.00	.00	.00	.08	1.27	.00	265.40
*	103.000	278.55	.00	1687.00	42.08	1644.50	.42	.00	.00	.34	1.75	.16	265.40
*	103.000	279.57	.00	2419.00	147.23	2268.42	3.34	.00	.00	.43	2.17	.31	265.40
*	103.000	279.96	.00	2874.00	230.83	2637.24	5.93	.00	.00	.49	2.43	.38	265.40
*	103.000	280.25	.00	3366.00	329.97	3025.93	10.10	.00	.00	.58	2.72	.30	265.40
*	103.000	280.51	.00	3849.00	443.97	3382.98	22.05	.00	.00	.67	2.97	.26	265.40
*	103.000	280.66	.00	4160.00	521.35	3603.46	35.20	.00	.00	.72	3.12	.27	265.40
*	103.000	281.06	.00	5104.00	771.14	4228.65	104.21	.00	.00	.87	3.54	.35	265.40
*	103.000	281.41	.00	6170.00	1057.21	4877.96	234.83	.00	.00	1.01	3.96	.47	265.40
	103.010	275.91	.00	852.00	.00	852.00	.00	.00	.00	.00	1.26	.00	265.40
	103.010	278.58	.00	1687.00	.00	1687.00	.00	.00	.00	.00	1.79	.00	265.40
	103.010	279.60	.00	2419.00	.00	2419.00	.00	.00	.00	.00	2.31	.00	265.40
	103.010	280.01	.00	2874.00	235.11	2632.81	6.08	.00	.00	.49	2.42	.38	265.40
	103.010	280.30	.00	3366.00	339.97	3014.88	11.14	.00	.00	.58	2.70	.28	265.40
	103.010	280.57	.00	3849.00	460.21	3362.73	26.05	.00	.00	.67	2.93	.25	265.40
	103.010	280.73	.00	4160.00	540.35	3577.89	41.76	.00	.00	.72	3.08	.27	265.40
	103.010	281.15	.00	5104.00	798.61	4183.18	122.21	.00	.00	.86	3.47	.35	265.40
	103.010	281.52	.00	6170.00	1094.08	4799.62	276.31	.00	.00	1.00	3.86	.48	265.40
	103.020	276.18	.00	852.00	.00	852.00	.00	852.00	.00	.00	1.21	.00	265.40
	103.020	279.70	.00	1687.00	.00	1687.00	.00	1687.00	.00	.00	1.60	.00	265.40
*	103.020	281.91	.00	2419.00	.00	2207.92	211.08	2393.68	5.68	.00	1.72	.26	265.40
*	103.020	282.25	.00	2874.00	610.79	1996.39	266.82	2351.08	534.42	.42	1.52	.25	265.40
*	103.020	282.43	.00	3366.00	740.96	2271.62	353.42	2294.35	1073.50	.48	1.70	.30	265.40
*	103.020	282.58	.00	3849.00	870.44	2535.79	442.76	2233.17	1621.36	.54	1.88	.34	265.40
*	103.020	282.67	.00	4160.00	954.59	2703.16	502.25	2196.58	1973.46	.57	1.99	.37	265.40
*	103.020	282.90	.00	5104.00	1214.42	3196.62	692.97	2097.04	3047.38	.68	2.31	.45	265.40
*	103.020	283.10	.00	6170.00	1510.69	3742.55	916.75	2008.49	4164.42	.79	2.67	.55	265.40
*	103.030	276.16	.00	852.00	.00	852.00	.00	.00	.00	.00	2.99	.00	264.10
*	103.030	279.73	.00	1687.00	311.64	1117.25	258.11	.00	.00	.50	2.33	.46	264.10
	103.030	281.96	.00	2419.00	815.98	795.97	807.05	.00	.00	.44	1.31	.41	264.10
	103.030	282.28	.00	2874.00	996.70	877.73	999.57	.00	.00	.48	1.40	.45	264.10
	103.030	282.47	.00	3366.00	1184.04	985.11	1196.85	.00	.00	.54	1.55	.51	264.10
	103.030	282.63	.00	3849.00	1368.46	1088.44	1392.10	.00	.00	.60	1.69	.56	264.10
	103.030	282.72	.00	4160.00	1487.97	1152.61	1519.43	.00	.00	.63	1.77	.59	264.10
	103.030	282.97	.00	5104.00	1851.38	1344.16	1908.47	.00	.00	.74	2.02	.69	264.10
	103.030	283.19	.00	6170.00	2264.07	1551.87	2354.06	.00	.00	.85	2.29	.79	264.10

	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
*	103.040	276.50	.00	640.00	.00	640.00	.00	.00	.00	.00	3.43	.00	267.70
*	103.040	279.87	.00	1165.00	12.46	905.57	246.97	.00	.00	.47	2.96	.47	267.70
*	103.040	282.01	.00	1531.00	87.06	591.50	852.44	.00	.00	.30	1.55	.45	267.70
*	103.040	282.33	.00	1742.00	119.12	616.15	1006.72	.00	.00	.33	1.56	.48	267.70
*	103.040	282.53	.00	1985.00	149.26	665.33	1170.41	.00	.00	.36	1.66	.51	267.70
*	103.040	282.69	.00	2198.00	177.18	704.69	1316.13	.00	.00	.40	1.73	.54	267.70
*	103.040	282.79	.00	2378.00	198.81	743.28	1435.91	.00	.00	.42	1.81	.57	267.70
*	103.040	283.06	.00	2857.00	260.48	834.51	1762.01	.00	.00	.49	1.99	.64	267.70
*	103.040	283.30	.00	2776.00	270.29	763.34	1742.37	.00	.00	.46	1.78	.58	267.70
*	103.190	278.73	.00	640.00	.00	640.00	.00	.00	.00	.00	4.36	.00	271.30
	103.190	280.62	.00	1165.00	461.06	544.67	159.27	.00	.00	.65	2.49	.49	271.30
	103.190	282.15	.00	1531.00	750.38	381.21	399.41	.00	.00	.50	1.36	.36	271.30

	103.190	282.46	.00	1742.00	866.13	398.62	477.25	.00	.00	.52	1.36	.37	271.30
	103.190	282.67	.00	1985.00	994.54	431.79	558.67	.00	.00	.56	1.44	.39	271.30
	103.190	282.85	.00	2198.00	1107.11	460.40	630.49	.00	.00	.59	1.50	.41	271.30
	103.190	282.96	.00	2378.00	1201.52	486.53	689.95	.00	.00	.62	1.56	.43	271.30
	103.190	283.25	.00	2857.00	1454.14	550.97	851.88	.00	.00	.70	1.70	.48	271.30
	103.190	283.45	.00	2776.00	1419.09	515.19	841.71	.00	.00	.65	1.55	.44	271.30
	103.230	279.59	.00	640.00	.00	640.00	.00	.00	.00	.00	4.12	.00	272.80
*	103.230	280.80	.00	1165.00	.00	1165.00	.00	.00	.00	.00	5.94	.00	272.80
*	103.230	282.21	.00	1531.00	153.76	663.87	713.37	.00	.00	.56	2.72	.60	272.80
*	103.230	282.52	.00	1742.00	212.72	674.33	854.95	.00	.00	.61	2.65	.61	272.80
*	103.230	282.73	.00	1985.00	268.50	715.93	1000.57	.00	.00	.67	2.74	.64	272.80
*	103.230	282.91	.00	2198.00	319.67	749.72	1128.61	.00	.00	.71	2.80	.67	272.80
*	103.230	283.03	.00	2378.00	361.42	782.06	1234.51	.00	.00	.75	2.88	.70	272.80
*	103.230	283.33	.00	2857.00	475.98	864.75	1516.27	.00	.00	.85	3.06	.76	272.80
*	103.230	283.52	.00	2776.00	484.36	802.70	1488.94	.00	.00	.80	2.78	.70	272.80
	103.240	279.70	.00	640.00	.00	640.00	.00	640.00	.00	.00	4.02	.00	272.80
	103.240	281.58	.00	1165.00	.00	1165.00	.00	1165.00	.00	.00	5.23	.00	272.80
*	103.240	283.89	.00	1531.00	.00	1531.00	.00	1531.00	.00	.00	5.08	.00	272.80
*	103.240	284.87	.00	1742.00	384.28	381.00	976.73	1628.87	114.71	.38	1.14	.31	272.80
*	103.240	285.08	.00	1985.00	448.63	419.70	1116.66	1626.79	372.46	.42	1.23	.34	272.80
*	103.240	285.19	.00	2198.00	503.38	456.08	1238.54	1605.94	594.02	.46	1.32	.36	272.80
*	103.240	285.28	.00	2378.00	549.74	486.79	1341.47	1597.19	785.21	.49	1.40	.38	272.80
*	103.240	285.49	.00	2857.00	675.69	567.28	1614.03	1563.57	1312.62	.57	1.59	.44	272.80
*	103.240	285.48	.00	2776.00	656.23	551.54	1568.23	1492.35	1299.82	.55	1.55	.43	272.80
*	103.400	281.79	.00	640.00	.00	640.00	.00	.00	.00	.00	2.50	.00	275.90
*	103.400	283.67	.00	1165.00	22.52	1098.93	43.54	.00	.00	.50	2.86	.57	275.90
*	103.400	285.27	.00	1531.00	115.01	1228.93	187.05	.00	.00	.64	2.49	.64	275.90
*	103.400	285.01	.00	1742.00	113.56	1443.34	185.11	.00	.00	.76	3.04	.77	275.90
*	103.400	285.23	.00	1985.00	145.92	1601.76	237.32	.00	.00	.84	3.27	.84	275.90
*	103.400	285.37	.00	2198.00	172.88	1743.87	281.25	.00	.00	.91	3.49	.91	275.90
*	103.400	285.48	.00	2378.00	196.25	1862.19	319.56	.00	.00	.97	3.68	.96	275.90
*	103.400	285.73	.00	2857.00	262.06	2166.55	428.38	.00	.00	1.12	4.14	1.10	275.90
*	103.400	285.72	.00	2776.00	252.92	2109.79	413.29	.00	.00	1.09	4.04	1.07	275.90

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	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
*	103.690	285.53	.00	640.00	.00	640.00	.00	.00	.00	.00	4.11	.00	281.00
*	103.690	286.95	.00	1165.00	.00	1165.00	.00	.00	.00	.00	4.97	.00	281.00
*	103.690	287.36	.00	1531.00	.00	1531.00	.00	.00	.00	.00	5.85	.00	281.00
*	103.690	287.97	.00	1742.00	.00	1742.00	.00	.00	.00	.00	5.74	.00	281.00
*	103.690	288.39	286.14	1985.00	.00	1935.75	49.25	.00	.00	.00	5.77	.50	281.00
*	103.690	288.69	286.45	2198.00	27.69	1975.00	195.31	.00	.00	.49	5.51	.78	281.00
*	103.690	288.89	.00	2378.00	73.64	1977.89	326.47	.00	.00	.63	5.28	.92	281.00
*	103.690	289.29	.00	2857.00	250.19	1977.26	629.55	.00	.00	.78	4.84	1.09	281.00
*	103.690	289.23	.00	2776.00	213.73	1982.55	579.72	.00	.00	.76	4.92	1.07	281.00
	103.700	285.53	.00	640.00	.00	640.00	.00	640.00	.00	.00	4.11	.00	281.00
	103.700	287.62	.00	1165.00	.00	1165.00	.00	1165.00	.00	.00	4.17	.00	281.00
	103.700	288.08	.00	1531.00	.00	1531.00	.00	1250.70	291.81	.00	4.91	.00	281.00
	103.700	288.38	.00	1742.00	.00	1699.94	42.05	1074.22	670.00	.00	5.07	.44	281.00
	103.700	288.63	.00	1985.00	17.62	1815.82	151.56	935.38	1063.31	.40	5.13	.68	281.00
	103.700	288.80	.00	2198.00	50.28	1887.73	259.99	817.02	1392.43	.56	5.13	.83	281.00
	103.700	288.92	.00	2378.00	83.43	1947.50	347.07	730.48	1663.60	.63	5.16	.92	281.00
	103.700	289.30	.00	2857.00	256.80	1963.70	636.50	538.34	2299.91	.78	4.80	1.09	281.00
	103.700	289.25	.00	2776.00	229.12	1950.14	596.73	566.15	2205.32	.76	4.81	1.07	281.00
*	103.850	288.06	.00	640.00	.00	640.00	.00	.00	.00	.00	2.91	.00	282.20
*	103.850	289.79	.00	1165.00	42.96	1122.04	.00	.00	.00	.40	3.35	.00	282.20
*	103.850	290.41	.00	1531.00	203.44	1326.99	.57	.00	.00	.64	3.48	.15	282.20
*	103.850	290.69	.00	1742.00	306.53	1430.64	4.83	.00	.00	.75	3.56	.26	282.20
*	103.850	290.91	.00	1985.00	413.61	1556.07	15.31	.00	.00	.84	3.72	.36	282.20
*	103.850	291.06	.00	2198.00	502.37	1667.77	27.85	.00	.00	.92	3.89	.41	282.20
*	103.850	291.18	.00	2378.00	576.46	1759.28	42.26	.00	.00	.99	4.02	.45	282.20
	103.850	291.36	.00	2857.00	750.34	2027.90	78.75	.00	.00	1.15	4.50	.58	282.20
	103.850	291.33	.00	2776.00	718.84	1986.08	71.08	.00	.00	1.13	4.43	.56	282.20
	103.860	288.35	.00	640.00	.00	640.00	.00	640.00	.00	.00	2.68	.00	282.20
	103.860	290.03	.00	1165.00	81.48	1083.52	.00	614.63	550.96	.45	3.07	.00	282.20
	103.860	290.42	.00	1531.00	203.80	1326.63	.58	411.17	1121.18	.64	3.48	.15	282.20
	103.860	290.69	.00	1742.00	306.02	1431.19	4.79	343.36	1403.42	.75	3.57	.26	282.20
	103.860	290.91	.00	1985.00	413.20	1556.57	15.23	314.80	1670.81	.84	3.73	.36	282.20
	103.860	291.06	.00	2198.00	502.35	1667.80	27.85	305.15	1893.54	.92	3.89	.41	282.20
	103.860	291.18	.00	2378.00	576.58	1759.11	42.31	302.93	2097.73	.99	4.02	.45	282.20
	103.860	291.36	.00	2857.00	751.43	2026.22	79.35	313.33	2524.38	1.15	4.49	.58	282.20
	103.860	291.33	.00	2776.00	720.30	1983.86	71.84	314.80	2462.86	1.13	4.42	.56	282.20
*	103.920	288.87	.00	377.00	.00	377.00	.00	.00	.00	.00	2.10	.00	284.00
*	103.920	290.54	.00	718.00	.00	718.00	.00	.00	.00	.00	2.59	.00	284.00
*	103.920	291.01	.00	950.00	17.62	932.38	.00	.00	.00	.27	3.03	.01	284.00
*	103.920	291.27	.00	1102.00	52.52	1047.45	2.03	.00	.00	.41	3.23	.17	284.00
*	103.920	291.52	.00	1301.00	104.78	1184.47	11.75	.00	.00	.52	3.48	.27	284.00
*	103.920	291.71	.00	1477.00	157.83	1291.76	27.41	.00	.00	.61	3.67	.34	284.00
*	103.920	291.85	.00	1627.00	206.88	1374.33	45.79	.00	.00	.67	3.80	.39	284.00
	103.920	292.16	.00	1984.00	340.74	1527.12	116.14	.00	.00	.79	4.00	.53	284.00
	103.920	292.11	.00	1897.00	311.66	1485.67	99.66	.00	.00	.76	3.92	.49	284.00

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	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
*	104.000	289.64	.00	377.00	.00	377.00	.00	.00	.00	.00	4.21	.00	286.00
*	104.000	291.29	.00	718.00	.00	718.00	.00	.00	.00	.00	4.53	.00	286.00
*	104.000	291.89	.00	950.00	.00	950.00	.00	.00	.00	.00	5.05	.00	286.00
*	104.000	292.19	.00	1102.00	7.96	1090.26	3.78	.00	.00	.40	5.36	.37	286.00
*	104.000	292.49	.00	1301.00	39.69	1238.11	23.20	.00	.00	.74	5.66	.63	286.00
*	104.000	292.71	.00	1477.00	76.80	1349.31	50.89	.00	.00	.93	5.86	.78	286.00

*	104.000	292.88	.00	1627.00	111.40	1435.59	80.01	.00	.00	1.07	6.01	.87	286.00
*	104.000	293.21	.00	1984.00	197.69	1624.04	162.26	.00	.00	1.31	6.35	1.05	286.00
*	104.000	293.14	.00	1897.00	176.21	1580.09	140.70	.00	.00	1.25	6.27	1.01	286.00
	104.130	293.98	.00	377.00	.00	377.00	.00	.00	.00	.00	5.11	.00	288.80
	104.130	295.33	.00	718.00	.00	718.00	.00	.00	.00	.00	6.91	.00	288.80
	104.130	296.02	294.50	950.00	.63	865.06	84.31	.00	.00	.30	7.18	1.12	288.80
	104.130	296.34	294.90	1102.00	6.77	945.47	149.76	.00	.00	.54	7.38	1.28	288.80
	104.130	296.65	295.39	1301.00	22.83	1038.65	239.51	.00	.00	.73	7.67	1.42	288.80
	104.130	296.87	296.73	1477.00	43.62	1109.34	324.03	.00	.00	.88	7.88	1.54	288.80
	104.130	297.03	296.90	1627.00	67.83	1161.77	397.40	.00	.00	.99	8.04	1.63	288.80
	104.130	297.36	297.26	1984.00	143.16	1265.87	574.97	.00	.00	1.16	8.29	1.80	288.80
	104.130	297.29	297.16	1897.00	122.14	1242.89	531.97	.00	.00	1.12	8.24	1.76	288.80
	104.140	294.12	.00	377.00	.00	377.00	.00	377.00	.00	.00	4.89	.00	288.80
*	104.140	296.66	.00	718.00	.00	582.00	136.00	654.39	57.68	.00	4.29	.80	288.80
*	104.140	297.15	.00	950.00	49.99	650.09	249.92	607.70	342.84	.57	4.40	.92	288.80
*	104.140	297.33	.00	1102.00	76.70	709.20	316.11	578.46	526.68	.64	4.66	1.01	288.80
*	104.140	297.50	.00	1301.00	114.21	787.94	398.85	549.68	752.20	.75	5.04	1.12	288.80
*	104.140	297.63	.00	1477.00	149.59	855.30	472.11	532.05	950.64	.83	5.37	1.21	288.80
*	104.140	297.71	.00	1627.00	176.74	919.34	530.93	517.77	1109.61	.91	5.71	1.30	288.80
	104.140	297.86	.00	1984.00	247.89	1061.05	675.06	485.24	1503.39	1.08	6.44	1.50	288.80
	104.140	297.83	.00	1897.00	230.58	1026.29	640.14	492.70	1406.83	1.04	6.26	1.45	288.80
	104.210	297.14	.00	377.00	111.14	265.86	.00	.00	.00	.89	4.82	.00	290.90
	104.210	298.04	.00	718.00	460.35	252.93	4.73	.00	.00	1.02	3.48	.37	290.90
	104.210	298.41	.00	950.00	656.39	275.01	18.61	.00	.00	1.09	3.44	.55	290.90
	104.210	298.61	.00	1102.00	783.09	288.19	30.72	.00	.00	1.14	3.43	.65	290.90
	104.210	298.85	.00	1301.00	946.33	306.85	47.82	.00	.00	1.20	3.46	.74	290.90
	104.210	299.04	.00	1477.00	1089.32	323.80	63.88	.00	.00	1.25	3.50	.81	290.90
	104.210	299.20	.00	1627.00	1211.03	337.44	78.53	.00	.00	1.29	3.53	.86	290.90
	104.210	299.52	.00	1984.00	1498.19	371.10	114.70	.00	.00	1.38	3.63	.96	290.90
	104.210	299.45	.00	1897.00	1428.37	362.99	105.65	.00	.00	1.36	3.60	.94	290.90
*	104.220	297.16	.00	377.00	117.88	259.12	.00	73.39	305.43	.88	4.65	.00	290.90
	104.220	298.04	.00	718.00	460.31	252.96	4.72	24.56	696.38	1.02	3.48	.37	290.90
	104.220	298.41	.00	950.00	656.35	275.05	18.60	22.75	929.66	1.09	3.44	.55	290.90
	104.220	298.61	.00	1102.00	783.03	288.28	30.69	21.90	1080.27	1.14	3.43	.65	290.90
	104.220	298.85	.00	1301.00	947.11	305.60	48.28	21.63	1291.08	1.19	3.44	.74	290.90
	104.220	299.04	.00	1477.00	1090.01	322.64	64.35	21.46	1464.85	1.24	3.48	.81	290.90
	104.220	299.20	.00	1627.00	1211.64	336.35	79.01	21.23	1611.80	1.28	3.51	.86	290.90
	104.220	299.52	.00	1984.00	1498.71	370.06	115.22	21.40	1966.33	1.37	3.61	.96	290.90
	104.220	299.45	.00	1897.00	1428.90	361.94	106.16	21.31	1878.77	1.35	3.59	.93	290.90

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	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
*	104.270	299.00	.00	377.00	213.56	160.12	3.32	.00	.00	.91	3.59	.55	293.30
	104.270	299.43	.00	718.00	469.89	237.35	10.76	.00	.00	1.39	4.81	.87	293.30
	104.270	299.71	.00	950.00	657.89	274.05	18.06	.00	.00	1.59	5.22	1.03	293.30
*	104.270	299.88	.00	1102.00	782.62	295.87	23.51	.00	.00	1.71	5.45	1.11	293.30
*	104.270	300.07	.00	1301.00	947.35	321.75	31.90	.00	.00	1.85	5.70	1.23	293.30
*	104.270	300.24	.00	1477.00	1094.80	341.10	41.10	.00	.00	1.95	5.86	1.33	293.30
*	104.270	300.38	.00	1627.00	1220.70	356.66	49.63	.00	.00	2.03	5.97	1.39	293.30
*	104.270	300.68	.00	1984.00	1520.49	390.71	72.80	.00	.00	2.18	6.20	1.49	293.30
*	104.270	300.61	.00	1897.00	1447.49	382.72	66.79	.00	.00	2.15	6.15	1.47	293.30
	104.340	300.43	.00	377.00	112.66	236.87	27.47	.00	.00	.93	4.76	.69	295.40
	104.340	301.09	.00	718.00	319.06	280.73	118.21	.00	.00	1.23	4.72	1.06	295.40
	104.340	301.40	.00	950.00	455.52	310.54	183.93	.00	.00	1.36	4.83	1.19	295.40
	104.340	301.58	.00	1102.00	544.97	328.16	228.87	.00	.00	1.43	4.89	1.25	295.40
	104.340	301.80	.00	1301.00	660.89	351.76	288.35	.00	.00	1.51	5.00	1.33	295.40
	104.340	301.97	.00	1477.00	761.25	371.43	344.32	.00	.00	1.58	5.10	1.40	295.40
	104.340	302.10	.00	1627.00	846.62	387.54	392.84	.00	.00	1.63	5.18	1.46	295.40
	104.340	302.40	.00	1984.00	1050.12	423.32	510.56	.00	.00	1.73	5.34	1.57	295.40
	104.340	302.33	.00	1897.00	1000.00	415.09	481.91	.00	.00	1.71	5.31	1.54	295.40
	104.350	300.42	.00	377.00	111.72	238.31	26.97	59.70	319.74	.94	4.80	.69	295.40
	104.350	301.09	.00	718.00	319.30	280.30	118.39	35.56	684.30	1.23	4.71	1.06	295.40
	104.350	301.40	.00	950.00	455.60	310.40	184.00	33.82	916.51	1.36	4.83	1.19	295.40
	104.350	301.58	.00	1102.00	544.11	329.85	228.03	33.62	1069.55	1.44	4.93	1.26	295.40
	104.350	301.80	.00	1301.00	660.46	352.74	287.81	33.54	1267.84	1.52	5.02	1.34	295.40
	104.350	301.97	.00	1477.00	760.99	372.12	343.89	33.98	1450.10	1.58	5.11	1.41	295.40
	104.350	302.10	.00	1627.00	846.45	388.02	392.53	33.96	1592.97	1.63	5.19	1.46	295.40
	104.350	302.40	.00	1984.00	1050.09	423.39	510.52	34.49	1954.18	1.73	5.34	1.57	295.40
	104.350	302.33	.00	1897.00	999.96	415.19	481.85	34.37	1867.39	1.71	5.31	1.54	295.40

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1991 CONDITIONS, RSS

SUMMARY PRINTOUT

SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
100.190	244.73	1072.00	.00	.00	.00	.00	.00	360.88	64.65	.00	.00
100.190	247.13	2113.00	.00	.00	2.40	.00	.00	560.86	290.46	.00	.00
100.190	247.80	2931.00	.00	.00	.67	.00	.00	1076.87	1398.41	.00	.00
100.190	248.09	3476.00	.00	.00	.29	.00	.00	1577.85	2104.17	.00	.00
100.190	248.36	4097.00	.00	.00	.27	.00	.00	2194.83	2439.01	.00	.00
100.190	248.58	4709.00	.00	.00	.22	.00	.00	2755.72	2664.41	.00	.00
100.190	248.69	5103.00	.00	.00	.11	.00	.00	3051.78	2704.21	.00	.00
100.190	249.04	6378.00	.00	.00	.35	.00	.00	4036.48	2943.85	.00	.00
100.190	249.58	8338.00	.00	.00	.54	.00	.00	5812.08	3417.06	.00	.00
100.640	248.41	1072.00	.00	.00	.00	3.68	.00	432.78	123.20	2376.00	21.65
100.640	250.87	2113.00	.00	.00	2.46	3.74	.00	767.12	149.23	2376.00	36.15
100.640	251.96	2931.00	.00	.00	1.09	4.16	.00	930.81	152.02	2376.00	53.48
100.640	252.46	3476.00	.00	.00	.50	4.37	.00	1006.26	153.03	2376.00	67.84

	100.640	252.89	4097.00	.00	.00	.43	4.53	.00	1072.32	153.91	2376.00	84.77
	100.640	253.23	4709.00	.00	.00	.34	4.65	.00	1124.86	154.60	2376.00	99.94
	100.640	253.46	5103.00	.00	.00	.23	4.77	.00	1160.45	155.07	2376.00	108.16
	100.640	254.06	6378.00	.00	.00	.60	5.02	.00	1252.83	156.28	2376.00	134.71
	100.640	254.60	8338.00	.00	.00	.54	5.02	.00	1338.72	157.00	2376.00	180.06
	100.640	248.42	1072.00	255.50	253.50	.00	.01	.00	433.83	123.22	10.00	21.74
	100.640	250.88	2113.00	255.50	253.50	2.46	.01	.00	768.21	149.26	10.00	36.32
	100.640	251.97	2931.00	255.50	253.50	1.09	.01	.00	932.61	152.05	10.00	53.69
	100.640	252.47	3476.00	255.50	253.50	.50	.01	.00	1008.54	153.06	10.00	68.07
	100.640	252.90	4097.00	255.50	253.50	.43	.02	.00	1074.99	153.94	10.00	85.02
	100.640	253.61	4709.00	255.50	253.50	.71	.38	.00	1184.32	155.39	10.00	100.21
	100.640	253.93	5103.00	255.50	253.50	.32	.47	.00	1233.68	156.03	10.00	108.43
	100.640	254.88	6378.00	255.50	253.50	.95	.82	.00	1382.58	157.00	10.00	135.02
*	100.640	255.76	8338.00	255.50	253.50	.88	1.16	.00	7700.66	2377.00	10.00	181.10
	100.750	249.33	1072.00	.00	.00	.00	.91	.00	447.34	123.57	581.00	27.62
	100.750	251.61	2113.00	.00	.00	2.28	.73	.00	757.36	148.92	581.00	46.50
	100.750	252.72	2931.00	.00	.00	1.11	.74	.00	1008.59	620.98	581.00	66.51
	100.750	253.26	3476.00	.00	.00	.55	.79	.00	1520.31	1301.80	581.00	84.06
	100.750	253.76	4097.00	.00	.00	.50	.86	.00	2316.57	1963.39	581.00	105.28
*	100.750	254.39	4709.00	.00	.00	.63	.78	.00	4175.92	3463.31	581.00	129.30
*	100.750	254.69	5103.00	.00	.00	.30	.76	.00	5306.71	3847.24	581.00	142.80
*	100.750	255.60	6378.00	.00	.00	.91	.72	.00	9031.54	4366.43	581.00	186.74
	100.750	255.98	8338.00	.00	.00	.38	.23	.00	10740.00	4507.82	581.00	273.20

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
*	101.080	252.94	1072.00	.00	.00	.00	3.61	.00	265.70	57.60	1742.00	41.88
*	101.080	255.11	2113.00	.00	.00	2.17	3.50	.00	406.19	70.38	1742.00	69.76
*	101.080	256.30	2931.00	.00	.00	1.19	3.59	.00	493.59	75.02	1742.00	96.07
*	101.080	256.40	3476.00	.00	.00	.10	3.14	.00	500.77	75.34	1742.00	121.86
*	101.080	256.51	4097.00	.00	.00	.11	2.74	.00	1962.22	1368.36	1742.00	177.01
*	101.080	256.55	4709.00	.00	.00	.04	2.16	.00	2019.88	1378.00	1742.00	233.50
*	101.080	256.57	5103.00	.00	.00	.02	1.88	.00	2047.77	1382.63	1742.00	266.48
*	101.080	256.72	6378.00	.00	.00	.15	1.12	.00	2255.49	1416.69	1742.00	375.94
*	101.080	257.23	8338.00	.00	.00	.51	1.25	.00	3003.30	1543.86	1742.00	501.90
	101.090	252.96	1072.00	256.70	257.80	.00	.01	.00	266.60	57.81	44.00	42.15
	101.090	255.13	2113.00	256.70	257.80	2.18	.03	.00	408.25	70.51	44.00	70.17
*	101.090	256.35	2931.00	256.70	257.80	1.22	.05	.00	497.56	75.20	44.00	96.57
	101.090	256.40	3476.00	256.70	257.80	.05	.00	.00	501.28	75.37	44.00	122.37
	101.090	257.00	4097.00	256.70	257.80	.59	.49	.00	2659.06	1483.92	44.00	179.35
*	101.090	257.16	4709.00	256.70	257.80	.16	.61	.00	2907.09	1527.34	44.00	235.98
*	101.090	257.26	5103.00	256.70	257.80	.10	.69	.00	3063.52	1554.10	44.00	269.06
*	101.090	257.60	6378.00	256.70	257.80	.34	.88	.00	3603.23	1643.08	44.00	378.90
*	101.090	258.13	8338.00	256.70	257.80	.53	.90	.00	4555.15	2099.94	44.00	505.71
	101.220	255.17	1072.00	.00	.00	.00	2.21	.00	291.39	61.85	739.00	46.88
	101.220	257.52	2113.00	.00	.00	2.35	2.39	.00	954.43	1115.35	739.00	81.51
*	101.220	258.48	2931.00	.00	.00	.95	2.12	.00	2197.18	1407.21	739.00	118.68
*	101.220	258.85	3476.00	.00	.00	.38	2.45	.00	2751.33	1558.42	739.00	148.97
	101.220	258.44	4097.00	.00	.00	-.42	1.44	.00	2140.13	1397.88	739.00	218.39
	101.220	258.68	4709.00	.00	.00	.24	1.51	.00	2465.03	1465.40	739.00	279.64
	101.220	258.81	5103.00	.00	.00	.13	1.55	.00	2679.95	1535.47	739.00	315.70
	101.220	259.20	6378.00	.00	.00	.39	1.60	.00	3325.45	1731.97	739.00	435.09
	101.220	259.71	8338.00	.00	.00	.51	1.58	.00	4339.89	2716.85	739.00	577.72
	101.780	262.53	1072.00	.00	.00	.00	7.35	.00	519.08	442.77	2957.00	71.76
	101.780	263.56	2113.00	.00	.00	1.03	6.03	.00	1530.85	1549.35	2957.00	148.81
*	101.780	263.62	2931.00	.00	.00	.06	5.14	.00	1626.60	1715.43	2957.00	218.97
*	101.780	263.74	3476.00	.00	.00	.12	4.88	.00	1831.41	1802.53	2957.00	267.92
	101.780	264.36	4097.00	.00	.00	.63	5.92	.00	3060.69	2166.01	2957.00	352.22
	101.780	264.53	4709.00	.00	.00	.17	5.86	.00	3440.35	2290.11	2957.00	430.72
	101.780	264.63	5103.00	.00	.00	.10	5.82	.00	3657.86	2353.03	2957.00	477.38
	101.780	264.92	6378.00	.00	.00	.29	5.72	.00	4373.99	2532.12	2957.00	630.16
	101.780	265.29	8338.00	.00	.00	.37	5.58	.00	5587.61	3512.23	2957.00	828.30
	101.790	262.53	1072.00	262.00	264.10	.00	.00	.00	520.79	443.61	23.00	72.03
	101.790	263.56	2113.00	262.00	264.10	1.03	.00	.00	1526.36	1545.61	23.00	149.61
	101.790	263.62	2931.00	262.00	264.10	.07	.00	.00	1638.65	1721.05	23.00	219.83
*	101.790	263.74	3476.00	262.00	264.10	.12	.00	.00	1852.08	1809.82	23.00	268.89
*	101.790	264.36	4097.00	262.00	264.10	.62	.00	.00	3049.20	2162.05	23.00	353.83
*	101.790	264.53	4709.00	262.00	264.10	.17	.00	.00	3427.99	2286.48	23.00	432.53
*	101.790	264.63	5103.00	262.00	264.10	.10	.00	.00	3656.35	2352.60	23.00	479.31
*	101.790	264.92	6378.00	262.00	264.10	.29	.00	.00	4360.40	2528.57	23.00	632.46
	101.790	265.29	8338.00	262.00	264.10	.37	.00	.00	5586.64	3511.53	23.00	831.25

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	101.900	263.94	852.00	.00	.00	.00	1.41	.00	439.49	401.96	634.00	79.02
	101.900	264.91	1687.00	.00	.00	.97	1.35	.00	1173.64	1385.65	634.00	169.26
	101.900	265.41	2419.00	.00	.00	.49	1.78	.00	1974.48	1848.12	634.00	246.13
	101.900	265.63	2874.00	.00	.00	.22	1.89	.00	2377.30	1923.75	634.00	299.67
	101.900	265.70	3366.00	.00	.00	.08	1.34	.00	2521.30	1950.08	634.00	394.37
	101.900	265.88	3849.00	.00	.00	.18	1.35	.00	2858.11	2087.57	634.00	478.28
	101.900	265.98	4160.00	.00	.00	.10	1.35	.00	3087.51	2195.99	634.00	528.39
	101.900	266.26	5104.00	.00	.00	.29	1.34	.00	3767.35	2436.93	634.00	691.61
	101.900	266.60	6170.00	.00	.00	.33	1.31	.00	4631.43	3022.08	634.00	905.61
	102.320	268.06	852.00	.00	.00	.00	4.12	.00	270.65	48.01	2218.00	97.06
	102.320	270.47	1687.00	.00	.00	2.40	5.56	.00	682.48	886.49	2218.00	216.28
	102.320	270.92	2419.00	.00	.00	.45	5.51	.00	1126.80	1131.55	2218.00	324.60
*	102.320	271.12	2874.00	.00	.00	.20	5.49	.00	1383.52	1382.66	2218.00	394.81
	102.320	271.42	3366.00	.00	.00	.30	5.72	.00	1829.73	1523.20	2218.00	504.42
	102.320	271.58	3849.00	.00	.00	.16	5.70	.00	2087.66	1589.30	2218.00	603.35
	102.320	271.67	4160.00	.00	.00	.09	5.69	.00	2231.22	1624.93	2218.00	662.88

	102.320	271.91	5104.00	.00	.00	.25	5.65	.00	2638.62	1697.97	2218.00	853.57
	102.320	272.13	6170.00	.00	.00	.22	5.53	.00	2998.33	1752.56	2218.00	1098.48
	102.600	271.18	852.00	.00	.00	.00	3.12	.00	243.42	45.98	1478.00	105.78
	102.600	274.46	1687.00	.00	.00	3.28	3.99	.00	957.27	1008.76	1478.00	244.10
	102.600	275.00	2419.00	.00	.00	.54	4.08	.00	1638.13	1476.17	1478.00	371.51
	102.600	275.22	2874.00	.00	.00	.22	4.10	.00	1981.04	1562.32	1478.00	451.89
	102.600	275.37	3366.00	.00	.00	.15	3.95	.00	2213.39	1620.55	1478.00	573.01
	102.600	275.54	3849.00	.00	.00	.17	3.96	.00	2506.68	1682.25	1478.00	681.29
	102.600	275.65	4160.00	.00	.00	.12	3.98	.00	2689.18	1703.95	1478.00	746.35
	102.600	275.96	5104.00	.00	.00	.30	4.04	.00	3217.00	1769.31	1478.00	952.91
	102.600	276.27	6170.00	.00	.00	.32	4.14	.00	3782.65	1792.76	1478.00	1213.52
	102.900	275.19	852.00	.00	.00	.00	4.01	.00	223.38	36.82	1585.00	114.28
	102.900	277.18	1687.00	.00	.00	1.99	2.72	.00	1537.42	1631.15	1585.00	283.69
	102.900	277.55	2419.00	.00	.00	.38	2.55	.00	2177.09	1774.86	1585.00	430.69
	102.900	277.74	2874.00	.00	.00	.19	2.52	.00	2533.29	1850.06	1585.00	521.51
	102.900	277.95	3366.00	.00	.00	.21	2.58	.00	2934.03	1935.18	1585.00	652.15
	102.900	278.12	3849.00	.00	.00	.17	2.58	.00	3260.97	1996.52	1585.00	769.69
	102.900	278.22	4160.00	.00	.00	.10	2.57	.00	3468.48	2011.53	1585.00	840.57
	102.900	278.51	5104.00	.00	.00	.28	2.55	.00	4038.08	2076.01	1585.00	1063.46
	102.900	278.79	6170.00	.00	.00	.28	2.52	.00	4633.05	2171.96	1585.00	1341.31
*	102.930	275.55	852.00	.00	.00	.00	.36	.00	453.64	65.42	150.00	115.44
	102.930	277.35	1687.00	.00	.00	1.80	.18	.00	724.70	368.63	150.00	286.54
	102.930	277.73	2419.00	.00	.00	.38	.18	.00	888.63	503.70	150.00	434.39
	102.930	277.91	2874.00	.00	.00	.19	.17	.00	988.07	570.25	150.00	525.68
	102.930	278.11	3366.00	.00	.00	.20	.16	.00	1106.26	640.42	150.00	656.86
*	102.930	278.27	3849.00	.00	.00	.16	.15	.00	1213.84	698.18	150.00	774.86
*	102.930	278.37	4160.00	.00	.00	.10	.14	.00	1283.16	732.99	150.00	846.03
*	102.930	278.63	5104.00	.00	.00	.26	.12	.00	1488.18	827.43	150.00	1069.74
*	102.930	278.89	6170.00	.00	.00	.26	.10	.00	1717.50	921.66	150.00	1348.48

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	102.950	275.60	852.00	.00	.00	.00	.05	.00	456.82	65.61	100.00	116.49
	102.950	277.48	1687.00	.00	.00	1.88	.13	.00	647.34	120.00	100.00	288.15
	102.950	277.93	2419.00	.00	.00	.45	.20	.00	851.10	384.85	100.00	436.61
	102.950	278.16	2874.00	.00	.00	.23	.25	.00	948.47	440.18	100.00	528.23
	102.950	278.40	3366.00	.00	.00	.24	.29	.00	1054.64	493.48	100.00	659.80
	102.950	278.61	3849.00	.00	.00	.21	.34	.00	1167.55	544.47	100.00	778.17
	102.950	278.74	4160.00	.00	.00	.13	.37	.00	1238.50	574.20	100.00	849.59
	102.950	279.18	5104.00	.00	.00	.45	.56	.00	2004.63	1027.54	100.00	1074.72
	102.950	279.57	6170.00	.00	.00	.39	.68	.00	2433.00	1167.79	100.00	1354.55
	102.960	275.62	852.00	279.40	274.40	.00	.02	.00	458.23	65.69	70.00	117.22
	102.960	277.68	1687.00	279.40	274.40	2.05	.20	.00	670.93	120.00	70.00	289.21
	102.960	278.41	2419.00	279.40	274.40	.73	.48	.00	1060.72	496.36	70.00	438.15
	102.960	278.88	2874.00	279.40	274.40	.47	.72	.00	1321.96	607.31	70.00	530.06
	102.960	279.15	3366.00	279.40	274.40	.28	.75	.00	1497.95	671.80	70.00	661.85
	102.960	279.43	3849.00	279.40	274.40	.27	.81	.00	1688.81	735.38	70.00	780.47
	102.960	279.58	4160.00	279.40	274.40	.16	.85	.00	1808.42	772.56	70.00	852.04
*	102.960	280.09	5104.00	279.40	274.40	.51	.91	.00	3082.21	1334.29	70.00	1078.81
*	102.960	280.41	6170.00	279.40	274.40	.32	.84	.00	3518.57	1384.05	70.00	1359.33
*	102.970	275.69	852.00	.00	.00	.00	.07	.00	1105.10	133.83	100.00	119.02
*	102.970	277.80	1687.00	.00	.00	2.11	.13	.00	1437.84	205.42	100.00	291.68
*	102.970	278.56	2419.00	.00	.00	.76	.16	.00	1690.50	500.19	100.00	441.87
*	102.970	279.04	2874.00	.00	.00	.48	.16	.00	1984.96	730.20	100.00	534.92
*	102.970	279.34	3366.00	.00	.00	.30	.19	.00	2223.39	873.13	100.00	667.58
*	102.970	279.63	3849.00	.00	.00	.29	.20	.00	2493.51	1010.92	100.00	787.17
*	102.970	279.80	4160.00	.00	.00	.17	.21	.00	2670.09	1091.64	100.00	859.36
*	102.970	280.21	5104.00	.00	.00	.42	.12	.00	3158.10	1223.74	100.00	1090.04
*	102.970	280.53	6170.00	.00	.00	.32	.12	.00	3562.02	1275.46	100.00	1372.40
	102.980	275.70	852.00	.00	.00	.00	.00	.00	1105.24	133.84	50.00	120.29
	102.980	277.81	1687.00	.00	.00	2.11	.01	.00	1394.02	140.00	50.00	293.31
	102.980	278.57	2419.00	.00	.00	.77	.01	.00	1584.25	329.84	50.00	443.75
	102.980	279.05	2874.00	.00	.00	.48	.01	.00	1767.40	434.08	50.00	537.07
	102.980	279.35	3366.00	.00	.00	.30	.01	.00	1906.83	499.05	50.00	669.95
	102.980	279.64	3849.00	.00	.00	.29	.02	.00	2509.52	1018.50	50.00	790.04
	102.980	279.81	4160.00	.00	.00	.17	.02	.00	2688.85	1099.87	50.00	862.44
	102.980	280.23	5104.00	.00	.00	.42	.02	.00	3184.20	1227.15	50.00	1093.68
	102.980	280.56	6170.00	.00	.00	.33	.03	.00	3609.74	1281.43	50.00	1376.51
	102.990	275.88	852.00	278.50	274.10	.00	.19	.00	1130.81	134.74	134.00	123.72
	102.990	278.55	1687.00	278.50	274.10	2.66	.74	.00	1579.27	326.54	134.00	297.88
	102.990	279.57	2419.00	278.50	274.10	1.02	.99	.00	2019.02	545.73	134.00	449.29
	102.990	279.96	2874.00	278.50	274.10	.39	.91	.00	2250.11	631.11	134.00	543.25
	102.990	280.24	3366.00	278.50	274.10	.28	.89	.00	2435.44	666.83	134.00	676.62
	102.990	280.51	3849.00	278.50	274.10	.27	.87	.00	3536.67	1272.28	134.00	799.34
	102.990	280.67	4160.00	278.50	274.10	.15	.85	.00	3732.43	1296.66	134.00	872.32
	102.990	281.07	5104.00	278.50	274.10	.41	.84	.00	4270.99	1361.49	134.00	1105.15
	102.990	281.42	6170.00	278.50	274.10	.35	.86	.00	4754.29	1417.15	134.00	1389.38

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
*	103.000	275.89	852.00	.00	.00	.00	.00	.00	674.61	104.65	100.00	125.80
*	103.000	278.55	1687.00	.00	.00	2.66	.00	.00	1067.11	251.45	100.00	300.92
*	103.000	279.57	2419.00	.00	.00	1.02	.00	.00	1399.36	402.30	100.00	453.22
*	103.000	279.96	2874.00	.00	.00	.39	.00	.00	1569.69	460.88	100.00	547.63
*	103.000	280.25	3366.00	.00	.00	.29	.00	.00	1715.19	601.19	100.00	681.39
*	103.000	280.51	3849.00	.00	.00	.26	-.01	.00	1891.05	745.03	100.00	805.57
*	103.000	280.66	4160.00	.00	.00	.15	-.01	.00	2010.00	828.28	100.00	878.91
*	103.000	281.06	5104.00	.00	.00	.40	-.01	.00	2388.04	1049.91	100.00	1112.79
*	103.000	281.41	6170.00	.00	.00	.35	-.01	.00	2776.66	1161.42	100.00	1398.02

	103.010	275.91	852.00	.00	.00	.00	.02	.00	673.89	96.56	100.00	127.34
	103.010	278.58	1687.00	.00	.00	2.67	.03	.00	941.50	102.00	100.00	303.23
	103.010	279.60	2419.00	.00	.00	1.02	.03	.00	1046.08	102.00	100.00	456.02
	103.010	280.01	2874.00	.00	.00	.41	.04	.00	1582.72	465.05	100.00	551.25
	103.010	280.30	3366.00	.00	.00	.30	.05	.00	1742.75	625.92	100.00	685.36
	103.010	280.57	3849.00	.00	.00	.27	.06	.00	1939.69	780.14	100.00	809.96
	103.010	280.73	4160.00	.00	.00	.16	.07	.00	2069.18	866.72	100.00	883.59
	103.010	281.15	5104.00	.00	.00	.42	.09	.00	2482.31	1098.23	100.00	1118.38
	103.010	281.52	6170.00	.00	.00	.37	.11	.00	2905.18	1180.08	100.00	1404.55
	103.020	276.18	852.00	281.90	275.40	.00	.27	.00	701.27	97.46	132.00	129.43
	103.020	279.70	1687.00	281.90	275.40	3.52	1.13	.00	1057.35	102.00	132.00	306.25
*	103.020	281.91	2419.00	281.90	275.40	2.20	2.31	.00	2102.87	762.78	132.00	460.80
*	103.020	282.25	2874.00	281.90	275.40	.34	2.24	.00	3811.11	1304.07	132.00	559.42
*	103.020	282.43	3366.00	281.90	275.40	.18	2.13	.00	4050.70	1334.94	132.00	694.14
*	103.020	282.58	3849.00	281.90	275.40	.15	2.01	.00	4254.59	1360.65	132.00	819.35
*	103.020	282.67	4160.00	281.90	275.40	.09	1.94	.00	4373.24	1375.40	132.00	893.35
*	103.020	282.90	5104.00	281.90	275.40	.23	1.75	.00	4697.59	1414.92	132.00	1129.26
*	103.020	283.10	6170.00	281.90	275.40	.20	1.58	.00	4988.90	1449.50	132.00	1416.51
*	103.030	276.16	852.00	.00	.00	.00	-.02	.00	285.30	48.63	100.00	130.56
*	103.030	279.73	1687.00	.00	.00	3.56	.02	.00	1656.72	1029.80	100.00	309.37
	103.030	281.96	2419.00	.00	.00	2.24	.06	.00	4455.14	1416.84	100.00	468.32
	103.030	282.28	2874.00	.00	.00	.32	.03	.00	4902.49	1461.91	100.00	569.43
	103.030	282.47	3366.00	.00	.00	.19	.04	.00	5178.92	1489.07	100.00	704.73
	103.030	282.63	3849.00	.00	.00	.16	.05	.00	5413.86	1511.78	100.00	830.45
	103.030	282.72	4160.00	.00	.00	.09	.05	.00	5558.97	1525.63	100.00	904.75
	103.030	282.97	5104.00	.00	.00	.25	.07	.00	5938.48	1561.28	100.00	1141.47
	103.030	283.19	6170.00	.00	.00	.22	.09	.00	6306.98	1595.14	100.00	1429.47
*	103.040	276.50	640.00	.00	.00	.00	.33	.00	186.46	33.26	200.00	131.64
*	103.040	279.87	1165.00	.00	.00	3.37	.15	.00	852.82	620.21	200.00	317.98
*	103.040	282.01	1531.00	.00	.00	2.14	.04	.00	2562.99	962.58	200.00	494.54
*	103.040	282.33	1742.00	.00	.00	.32	.05	.00	2876.41	1052.78	200.00	598.62
*	103.040	282.53	1985.00	.00	.00	.20	.06	.00	3090.34	1110.14	200.00	735.85
*	103.040	282.69	2198.00	.00	.00	.17	.06	.00	3281.04	1158.89	200.00	863.25
*	103.040	282.79	2378.00	.00	.00	.10	.07	.00	3395.92	1187.29	200.00	938.58
*	103.040	283.06	2857.00	.00	.00	.27	.09	.00	3724.38	1264.97	200.00	1178.11
*	103.040	283.30	2776.00	.00	.00	.25	.11	.00	4046.01	1336.68	200.00	1468.87

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
*	103.190	278.73	640.00	.00	.00	.00	2.23	.00	146.76	34.58	792.00	134.67
	103.190	280.62	1165.00	.00	.00	1.89	.75	.00	1245.13	986.59	792.00	332.94
	103.190	282.15	1531.00	.00	.00	1.53	.14	.00	2906.42	1143.86	792.00	533.69
	103.190	282.46	1742.00	.00	.00	.31	.13	.00	3267.65	1160.08	792.00	642.50
	103.190	282.67	1985.00	.00	.00	.21	.14	.00	3510.68	1170.87	792.00	782.96
	103.190	282.85	2198.00	.00	.00	.18	.15	.00	3706.89	1179.50	792.00	913.12
	103.190	282.96	2378.00	.00	.00	.11	.16	.00	3836.17	1185.16	792.00	990.19
	103.190	283.25	2857.00	.00	.00	.29	.19	.00	4188.50	1200.44	792.00	1234.60
	103.190	283.45	2776.00	.00	.00	.20	.15	.00	4440.68	1211.25	792.00	1529.53
	103.230	279.59	640.00	.00	.00	.00	.86	.00	155.46	32.93	211.00	135.40
*	103.230	280.80	1165.00	.00	.00	1.20	.18	.00	196.14	34.00	211.00	336.43
*	103.230	282.21	1531.00	.00	.00	1.41	.06	.00	1708.68	949.10	211.00	544.87
*	103.230	282.52	1742.00	.00	.00	.31	.06	.00	2007.87	971.92	211.00	655.28
*	103.230	282.73	1985.00	.00	.00	.21	.06	.00	2215.96	987.48	211.00	796.83
*	103.230	282.91	2198.00	.00	.00	.18	.07	.00	2394.15	1000.61	211.00	927.89
*	103.230	283.03	2378.00	.00	.00	.11	.07	.00	2518.08	1009.64	211.00	1005.58
*	103.230	283.33	2857.00	.00	.00	.30	.08	.00	2825.20	1031.69	211.00	1251.58
*	103.230	283.52	2776.00	.00	.00	.19	.07	.00	3011.12	1044.80	211.00	1547.58
	103.240	279.70	640.00	284.70	277.80	.00	.11	.00	159.21	33.17	180.00	136.06
	103.240	281.58	1165.00	284.70	277.80	1.87	.78	.00	222.74	34.00	180.00	337.29
*	103.240	283.89	1531.00	284.70	277.80	2.31	1.68	.00	301.32	34.00	180.00	549.02
*	103.240	284.87	1742.00	284.70	277.80	.98	2.35	.00	4501.56	1131.08	180.00	668.73
*	103.240	285.08	1985.00	284.70	277.80	.21	2.34	.00	4736.87	1143.78	180.00	811.20
*	103.240	285.19	2198.00	284.70	277.80	.12	2.28	.00	4874.49	1151.14	180.00	942.91
*	103.240	285.28	2378.00	284.70	277.80	.09	2.26	.00	4976.68	1156.57	180.00	1021.06
*	103.240	285.49	2857.00	284.70	277.80	.20	2.16	.00	5210.77	1170.39	180.00	1268.19
*	103.240	285.48	2776.00	284.70	277.80	.00	1.97	.00	5205.77	1170.10	180.00	1564.56
*	103.400	281.79	640.00	.00	.00	.00	2.09	.00	255.92	66.45	898.00	140.33
*	103.400	283.67	1165.00	.00	.00	1.87	2.09	.00	504.71	201.04	898.00	344.68
*	103.400	285.27	1531.00	.00	.00	1.61	1.38	.00	961.52	381.18	898.00	561.63
*	103.400	285.01	1742.00	.00	.00	-.26	.14	.00	864.16	348.49	898.00	717.90
*	103.400	285.23	1985.00	.00	.00	.22	.16	.00	945.02	375.84	898.00	863.29
*	103.400	285.37	2198.00	.00	.00	.14	.18	.00	998.62	392.92	898.00	996.77
*	103.400	285.48	2378.00	.00	.00	.11	.19	.00	1040.99	405.92	898.00	1076.25
*	103.400	285.73	2857.00	.00	.00	.26	.25	.00	1149.02	437.30	898.00	1326.53
*	103.400	285.72	2776.00	.00	.00	-.02	.23	.00	1141.40	435.17	898.00	1622.79
*	103.690	285.53	640.00	.00	.00	.00	3.74	.00	155.79	49.31	1531.00	147.57
*	103.690	286.95	1165.00	.00	.00	1.42	3.28	.00	234.63	62.55	1531.00	357.55
*	103.690	287.36	1531.00	.00	.00	.42	2.09	.00	261.75	66.74	1531.00	582.66
*	103.690	287.97	1742.00	.00	.00	.60	2.96	.00	303.52	72.72	1531.00	738.04
*	103.690	288.39	1985.00	.00	.00	.43	3.16	.00	434.12	578.74	1531.00	886.87
*	103.690	288.69	2198.00	.00	.00	.29	3.32	.00	663.60	848.92	1531.00	1025.01
*	103.690	288.89	2378.00	.00	.00	.20	3.41	.00	846.89	993.04	1531.00	1108.25
*	103.690	289.29	2857.00	.00	.00	.41	3.56	.00	1304.86	1179.49	1531.00	1368.08
*	103.690	289.23	2776.00	.00	.00	-.06	3.52	.00	1224.91	1174.22	1531.00	1662.85

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	103.700	285.53	640.00	288.00	287.30	.00	.00	.00	155.80	49.31	35.00	147.69
	103.700	287.62	1165.00	288.00	287.30	2.09	.67	.00	279.10	69.28	35.00	357.76
	103.700	288.08	1531.00	288.00	287.30	.46	.71	.00	312.02	73.87	35.00	582.89

	103.700	288.38	1742.00	288.00	287.30	.30	.41	.00	431.85	574.63	35.00	738.34
	103.700	288.63	1985.00	288.00	287.30	.25	.23	.00	620.21	834.66	35.00	887.30
	103.700	288.80	2198.00	288.00	287.30	.17	.11	.00	770.00	933.24	35.00	1025.59
	103.700	288.92	2378.00	288.00	287.30	.12	.03	.00	884.38	1020.93	35.00	1108.95
	103.700	289.30	2857.00	288.00	287.30	.38	.01	.00	1322.47	1180.64	35.00	1369.14
	103.700	289.25	2776.00	288.00	287.30	-.05	.02	.00	1266.75	1176.98	35.00	1663.85
*	103.850	288.06	640.00	.00	.00	.00	2.53	.00	220.11	59.73	845.00	151.34
*	103.850	289.79	1165.00	.00	.00	1.73	2.17	.00	441.95	351.40	845.00	363.72
*	103.850	290.41	1531.00	.00	.00	.62	2.33	.00	700.67	458.51	845.00	589.67
*	103.850	290.69	1742.00	.00	.00	.27	2.31	.00	831.21	505.14	845.00	746.87
*	103.850	290.91	1985.00	.00	.00	.22	2.28	.00	949.92	565.54	845.00	897.96
*	103.850	291.06	2198.00	.00	.00	.15	2.26	.00	1041.41	641.12	845.00	1037.89
*	103.850	291.18	2378.00	.00	.00	.11	2.26	.00	1115.89	663.98	845.00	1122.48
	103.850	291.36	2857.00	.00	.00	.18	2.06	.00	1237.60	674.60	845.00	1386.15
	103.850	291.33	2776.00	.00	.00	-.03	2.08	.00	1214.19	672.57	845.00	1680.39
	103.860	288.35	640.00	289.10	287.40	.00	.30	.00	238.68	61.97	35.00	151.52
	103.860	290.03	1165.00	289.10	287.40	1.68	.24	.00	535.48	404.88	35.00	364.11
	103.860	290.42	1531.00	289.10	287.40	.39	.00	.00	701.31	458.75	35.00	590.23
	103.860	290.69	1742.00	289.10	287.40	.27	.00	.00	830.25	504.81	35.00	747.54
	103.860	290.91	1985.00	289.10	287.40	.22	.00	.00	949.07	564.80	35.00	898.72
	103.860	291.06	2198.00	289.10	287.40	.15	.00	.00	1041.37	641.08	35.00	1038.73
	103.860	291.18	2378.00	289.10	287.40	.11	.00	.00	1116.17	664.01	35.00	1123.38
	103.860	291.36	2857.00	289.10	287.40	.18	.00	.00	1240.05	674.81	35.00	1387.15
	103.860	291.33	2776.00	289.10	287.40	-.03	.00	.00	1217.49	672.86	35.00	1681.37
*	103.920	288.87	377.00	.00	.00	.00	.51	.00	179.63	52.79	370.00	153.30
*	103.920	290.54	718.00	.00	.00	1.68	.51	.00	277.01	63.43	370.00	367.69
*	103.920	291.01	950.00	.00	.00	.47	.59	.00	371.77	297.72	370.00	595.05
*	103.920	291.27	1102.00	.00	.00	.26	.59	.00	465.65	424.65	370.00	753.42
*	103.920	291.52	1301.00	.00	.00	.25	.61	.00	584.40	544.34	370.00	905.73
*	103.920	291.71	1477.00	.00	.00	.19	.64	.00	694.04	635.13	370.00	1046.69
*	103.920	291.85	1627.00	.00	.00	.14	.67	.00	790.06	705.10	370.00	1132.14
	103.920	292.16	1984.00	.00	.00	.32	.80	.00	1033.17	791.10	370.00	1397.63
	103.920	292.11	1897.00	.00	.00	-.05	.78	.00	990.68	787.47	370.00	1691.55
*	104.000	289.64	377.00	.00	.00	.00	.77	.00	89.48	37.12	422.00	154.60
*	104.000	291.29	718.00	.00	.00	1.65	.74	.00	158.63	46.81	422.00	369.80
*	104.000	291.89	950.00	.00	.00	.61	.88	.00	188.18	50.38	422.00	597.74
*	104.000	292.19	1102.00	.00	.00	.29	.91	.00	233.59	226.09	422.00	756.77
*	104.000	292.49	1301.00	.00	.00	.30	.97	.00	309.42	280.70	422.00	909.98
*	104.000	292.71	1477.00	.00	.00	.23	1.01	.00	377.96	322.19	422.00	1051.76
*	104.000	292.88	1627.00	.00	.00	.17	1.03	.00	435.01	353.03	422.00	1137.92
*	104.000	293.21	1984.00	.00	.00	.33	1.05	.00	561.55	413.30	422.00	1405.11
*	104.000	293.14	1897.00	.00	.00	-.07	1.03	.00	531.53	399.83	422.00	1698.70

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	104.130	293.98	377.00	.00	.00	.00	4.34	.00	73.79	21.40	686.00	155.89
	104.130	295.33	718.00	.00	.00	1.35	4.05	.00	103.90	23.32	686.00	371.87
	104.130	296.02	950.00	.00	.00	.69	4.12	.00	197.61	156.40	686.00	600.66
	104.130	296.34	1102.00	.00	.00	.32	4.15	.00	257.45	219.48	686.00	760.42
	104.130	296.65	1301.00	.00	.00	.31	4.16	.00	335.11	280.96	686.00	914.68
	104.130	296.87	1477.00	.00	.00	.22	4.15	.00	400.48	325.62	686.00	1057.37
	104.130	297.03	1627.00	.00	.00	.16	4.14	.00	456.60	370.28	686.00	1144.30
	104.130	297.36	1984.00	.00	.00	.34	4.15	.00	596.81	456.23	686.00	1413.31
	104.130	297.29	1897.00	.00	.00	-.08	4.15	.00	562.53	442.47	686.00	1706.46
	104.140	294.12	377.00	296.50	294.00	.00	.15	.00	77.03	21.61	33.00	155.95
*	104.140	296.66	718.00	296.50	294.00	2.53	1.33	.00	306.36	208.55	33.00	372.02
*	104.140	297.15	950.00	296.50	294.00	.50	1.13	.00	507.40	406.50	33.00	600.93
*	104.140	297.33	1102.00	296.50	294.00	.18	1.00	.00	585.66	452.29	33.00	760.73
*	104.140	297.50	1301.00	296.50	294.00	.17	.85	.00	665.85	479.87	33.00	915.05
*	104.140	297.63	1477.00	296.50	294.00	.12	.76	.00	727.84	500.14	33.00	1057.80
*	104.140	297.71	1627.00	296.50	294.00	.08	.68	.00	762.89	511.25	33.00	1144.77
	104.140	297.86	1984.00	296.50	294.00	.16	.50	.00	844.82	536.32	33.00	1413.86
	104.140	297.83	1897.00	296.50	294.00	-.03	.54	.00	827.25	531.04	33.00	1706.99
	104.210	297.14	377.00	.00	.00	.00	3.01	.00	180.06	301.05	422.00	157.16
	104.210	298.04	718.00	.00	.00	.91	1.39	.00	536.95	465.76	422.00	375.95
	104.210	298.41	950.00	.00	.00	.36	1.25	.00	713.26	504.65	422.00	606.59
	104.210	298.61	1102.00	.00	.00	.21	1.28	.00	818.50	515.49	422.00	767.24
	104.210	298.85	1301.00	.00	.00	.24	1.35	.00	942.62	527.99	422.00	922.50
	104.210	299.04	1477.00	.00	.00	.19	1.41	.00	1043.37	537.92	422.00	1065.99
	104.210	299.20	1627.00	.00	.00	.16	1.49	.00	1128.37	546.16	422.00	1153.51
	104.210	299.52	1984.00	.00	.00	.33	1.66	.00	1310.33	563.39	422.00	1423.82
	104.210	299.45	1897.00	.00	.00	-.08	1.62	.00	1267.33	559.37	422.00	1716.67
*	104.220	297.16	377.00	296.40	296.40	.00	.02	.00	189.58	310.80	34.00	157.31
	104.220	298.04	718.00	296.40	296.40	.88	.00	.00	536.84	465.72	34.00	376.36
	104.220	298.41	950.00	296.40	296.40	.36	.00	.00	713.11	504.63	34.00	607.15
	104.220	298.61	1102.00	296.40	296.40	.21	.00	.00	818.16	515.45	34.00	767.88
	104.220	298.85	1301.00	296.40	296.40	.24	.00	.00	947.90	528.51	34.00	923.24
	104.220	299.04	1477.00	296.40	296.40	.19	.00	.00	1048.65	538.43	34.00	1066.81
	104.220	299.20	1627.00	296.40	296.40	.16	.00	.00	1133.55	546.66	34.00	1154.40
	104.220	299.52	1984.00	296.40	296.40	.33	.00	.00	1315.79	563.90	34.00	1424.85
	104.220	299.45	1897.00	296.40	296.40	-.08	.00	.00	1272.71	559.87	34.00	1717.66
*	104.270	299.00	377.00	.00	.00	.00	1.84	.00	284.93	255.77	343.00	159.08
	104.270	299.43	718.00	.00	.00	.43	1.39	.00	400.80	283.49	343.00	379.85
	104.270	299.71	950.00	.00	.00	.28	1.31	.00	482.63	301.53	343.00	611.59
*	104.270	299.88	1102.00	.00	.00	.16	1.27	.00	532.83	312.09	343.00	772.89
*	104.270	300.07	1301.00	.00	.00	.19	1.22	.00	595.16	326.56	343.00	928.97
*	104.270	300.24	1477.00	.00	.00	.17	1.20	.00	650.83	341.56	343.00	1073.12
*	104.270	300.38	1627.00	.00	.00	.14	1.18	.00	697.91	353.74	343.00	1161.19
*	104.270	300.68	1984.00	.00	.00	.30	1.15	.00	809.31	381.03	343.00	1432.74
*	104.270	300.61	1897.00	.00	.00	-.07	1.16	.00	782.33	374.61	343.00	1725.29

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SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
104.340	300.43	377.00	.00	.00	.00	1.42	.00	210.05	303.31	343.00	160.82
104.340	301.09	718.00	.00	.00	.66	1.65	.00	430.15	371.22	343.00	382.78
104.340	301.40	950.00	.00	.00	.32	1.69	.00	553.23	404.25	343.00	615.25
104.340	301.58	1102.00	.00	.00	.18	1.70	.00	630.91	423.78	343.00	777.01
104.340	301.80	1301.00	.00	.00	.22	1.73	.00	723.68	446.03	343.00	933.63
104.340	301.97	1477.00	.00	.00	.17	1.73	.00	800.75	466.74	343.00	1078.25
104.340	302.10	1627.00	.00	.00	.14	1.73	.00	864.88	483.29	343.00	1166.72
104.340	302.40	1984.00	.00	.00	.30	1.72	.00	1010.61	507.23	343.00	1439.18
104.340	302.33	1897.00	.00	.00	-.07	1.72	.00	976.23	503.96	343.00	1731.52
104.350	300.42	377.00	299.70	298.40	.00	-.01	.00	207.87	302.56	34.00	160.98
104.350	301.09	718.00	299.70	298.40	.67	.00	.00	431.07	371.48	34.00	383.11
104.350	301.40	950.00	299.70	298.40	.32	.00	.00	553.60	404.35	34.00	615.68
104.350	301.58	1102.00	299.70	298.40	.18	.00	.00	626.34	422.65	34.00	777.50
104.350	301.80	1301.00	299.70	298.40	.22	.00	.00	720.85	445.32	34.00	934.19
104.350	301.97	1477.00	299.70	298.40	.17	.00	.00	798.66	466.19	34.00	1078.88
104.350	302.10	1627.00	299.70	298.40	.14	.00	.00	863.35	482.91	34.00	1167.40
104.350	302.40	1984.00	299.70	298.40	.30	.00	.00	1010.39	507.21	34.00	1439.97
104.350	302.33	1897.00	299.70	298.40	-.07	.00	.00	975.89	503.93	34.00	1732.28

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SUMMARY OF ERRORS AND SPECIAL NOTES

WARNING SECNO= 100.640 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 100.750 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 100.750 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 100.750 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 101.080 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 101.080 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 101.080 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO= 101.080 PROFILE= 4 WSEL ASSUMED BASED ON MIN DIFF
CAUTION SECNO= 101.080 PROFILE= 4 20 TRIALS ATTEMPTED TO BALANCE WSEL
WARNING SECNO= 101.080 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 101.080 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 101.080 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 101.080 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 101.080 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO= 101.090 PROFILE= 3 20 TRIALS OF EG NOT ENOUGH
WARNING SECNO= 101.090 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 101.090 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 101.090 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 101.090 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 101.220 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 101.220 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 101.780 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 101.780 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO= 101.790 PROFILE= 4 HYDRAULIC JUMP D.S.
CAUTION SECNO= 101.790 PROFILE= 5 HYDRAULIC JUMP D.S.
CAUTION SECNO= 101.790 PROFILE= 6 HYDRAULIC JUMP D.S.
CAUTION SECNO= 101.790 PROFILE= 7 HYDRAULIC JUMP D.S.
CAUTION SECNO= 101.790 PROFILE= 8 HYDRAULIC JUMP D.S.

WARNING SECNO= 102.320 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 102.930 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 102.930 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 102.930 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 102.930 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 102.930 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 102.960 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 102.960 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 102.970 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

1

WARNING SECNO= 102.970 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 102.970 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 102.970 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 102.970 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 102.970 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 102.970 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 102.970 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 102.970 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 103.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 103.020 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.020 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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 WARNING SECNO=    103.020  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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 WARNING SECNO=    103.020  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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 WARNING SECNO=    103.030  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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 WARNING SECNO=    103.040  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.040  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.040  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.040  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.040  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.040  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.040  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    103.190  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    103.230  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.230  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.230  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.230  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.230  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.230  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.230  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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 WARNING SECNO=    103.240  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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 WARNING SECNO=    103.240  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.240  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.240  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.240  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    103.400  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.400  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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 WARNING SECNO=    103.400  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.400  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.400  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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 WARNING SECNO=    103.400  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.400  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    103.690  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.690  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.690  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.690  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.690  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.690  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.690  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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 WARNING SECNO=    103.690  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    103.850  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.850  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.850  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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 WARNING SECNO=    103.850  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.850  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.850  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    103.920  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.920  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.920  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.920  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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 WARNING SECNO=    103.920  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.920  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    104.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.000  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.000  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.000  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.000  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.000  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.000  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
1
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 WARNING SECNO=    104.000  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    104.140  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.140  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.140  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.140  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.140  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.140  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 CAUTION SECNO=    104.220  PROFILE=  1  HYDRAULIC JUMP D.S.

 WARNING SECNO=    104.270  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.270  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.270  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    104.270  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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WARNING SECNO=    104.270  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    104.270  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    104.270  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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1*****************************************
 *  HEC-2 WATER SURFACE PROFILES         *
 *                                       *
 *  Version   4.6.2;  May 1991           *
 *                                       *
 *  RUN DATE    05FEB13    TIME   19:26:27 *
 *****************************************
```

Higginbottom Creek + Viney Slough Ditch Existing Conditions

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*****************************************
* U.S. ARMY CORPS OF ENGINEERS          *
* HYDROLOGIC ENGINEERING CENTER         *
* 609 SECOND STREET, SUITE D            *
* DAVIS, CALIFORNIA 95616-4687          *
*          (916) 756-1104               *
*****************************************
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X     X  XXXXXXX   XXXXX             XXXXX
X     X  X        X     X           X     X
X     X  X        X                       X
XXXXXXX  XXXX     X          XXXXX    XXXXX
X     X  X        X                  X
X     X  X        X     X            X
X     X  XXXXXXX   XXXXX             XXXXXXX
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1
   05FEB13      19:26:27                                                    PAGE    1


                                                    THIS RUN EXECUTED 05FEB13    19:26:27
 ************************************
  HEC-2 WATER SURFACE PROFILES

  Version   4.6.2;  May 1991
 ************************************


T1        WHITEMAN'S CREEK FEASIBILITY STUDY
T2        VINEY SLOUGH DITCH
T3        EXISTING CONDITIONS, APR 1991 RSS

J1  ICHECK    INQ       NINV      IDIR      STRT      METRIC    HVINS     Q         WSEL      FQ

       0        2         0         0   .000500         0         0         0       227

J2  NPROF     IPLOT     PRFVS     XSECV     XSECH     FN        ALLDC     IBW       CHNIM     ITRACE

       1        0        -1

J3  VARIABLE CODES FOR SUMMARY PRINTOUT

      38         1         2        43        13        14        15        47        46        55
      26        56        42                  38         1        43        40        41        50
      51        52        25         4        39         7

NC      .09       .09       .055      .1        .3
QT        9       486      1331      2207      2777      3384      4087      4680      6423     11670
X1   17.421        27     10858     10909
GR      227      5000     227.1     10100       227     10200     226.4     10300     226.6     10400
GR    226.6     10500     226.6     10600     226.9     10700     227.5     10800     228.2     10858
GR    219.5     10870     218.8     10880     219.5     10890       227     10900     228.2     10909
GR    227.9     10951     227.4     10966     227.1     11000     227.2     11100     227.1     11200
GR    227.3     11300     227.1     11400     227.5     11500     227.2     11561       230     12045
GR      235     12880       240     13818

NC                                    .3        .5
X1   17.502         0         0         0       400       400       400         0       0.1

SB     0.95       1.6       2.6         0        10       1.3       301      2.61     219.1     219.1
X1   17.503         0         0         0        14        14        14
X2        0         0         1     228.3     226.9         0         0      1.33
BT      -21      5000     227.1         0     10100     227.1         0     10200       227
BT               10300     226.9               10400     227.3               10500     227.2
BT               10600       227               10700     226.9               10800     227.5
BT               10900     229.9               10914     230.1               10971       230
BT               11000     229.2               11100     227.9               11200     227.9
BT               11300     227.8               11400     227.6               11500     227.8
BT               11561     228.2               12045       231               12880       236
1
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NC      .09       .09       .055      .1        .3
X1   17.524         0         0         0       100       100       100

X1   18.481        58     12672     12773      5060      5060      5069         0      -.1
GR    229.8      7400     229.8      7401     229.8      7402     229.9      7403     229.8      7404
GR    229.8     10000     228.9     10100     228.7     10200     228.7     10300     228.6     10400
GR    228.6     10500     228.4     10600     228.3     10700     228.5     10800     228.4     10900
GR    228.6     11000     228.2     11100     228.2     11200     228.4     11300     228.2     11400
GR    228.1     11500     228.1     11600     228.0     11700       228     12000     227.9     12100
GR    227.8     12200     227.7     12300     227.9     12400     227.8     12500     227.7     12600
GR    227.9     12617     228.8     12642     230.4     12672       230     12695     229.9     12707
GR    220.7     12718     220.4     12726     220.7     12734     220.9     12739     229.6     12748
GR    229.7     12751       230     12762     230.2     12773     228.8     12793     228.4     12800
GR      228     12900       228     13000     228.4     13100     228.4     13200     228.1     13300
GR      228     13400     227.9     13500     227.8     13600     227.6     13700     227.4     14000
GR      230     15617       235     16138       240     16502

NC                                    .3        .5
X1   18.562         0         0         0       400       400       400         0        .1

SB      0.9       1.6       2.6         0      17.5      1.08       299      1.26     220.2     220.2
X1   18.563         0         0         0        16        16        16
X2        0         0         1     230.4       229         0         0      1.33
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```
BT      -32      7400     229.8              7401     229.8              7402     229.9
BT               10000    229.8              10100    229                10200    228.9
BT               10300    228.7              10500    229.1              10700    228.9
BT               10900    229.3              11000    229                11400    229.1
BT               11700    228.4              12000    229.1              12100    229
BT               12200    229.2              12300    229.1              12400    229.2
BT               12500    228.9              12600    229                12700    231.4
BT               12752    232.2              12800    231.9              12900    230.4
BT               13100    230.8              13400    229.3              13500    229.3
BT               13600    229                13700    229.6              14000    229.3
BT               15617    231.9              16138    236.9

NC                                    .1       .3
QT        9      582      1560     2409     2963     3679     4491     5114     6732     10959
X1   18.584      0        0        0        100      100      100

X1   19.451      37       11324    11400    4594     4594     4594     0        -.2
GR      230      6000     230      8681     230      8682     230      8683     230      8684
GR    229.5      10000    229      10200    229.1    10500    229      10600    229.3    10800
GR    230.1      10900    229.9    11000    229.9    11200    230.9    11260    231.9    11300
GR      232      11307    232.5    11324    228.5    11334    222.6    11344    222.4    11354
GR    222.6      11365    231.6    11373    232.6    11400    230.9    11500    230.8    11600
GR    230.6      11700    231.3    11800    231      11900    229.4    12000    229      12100
GR    229.2      12300    229.1    12400    229.8    12600    229.9    12800    229.9    13000
GR      235      14371    240      15100
1
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NC                                    .3       .5
X1   19.562      0        0        0        600      600      600      0        .2

SB      0.9      1.6      2.6      0        20       1.4      322.3    1.36     222.5    222.5
X1   19.563      0        0        0        16       16       16
X2        0      0        1        232.5    230      0        0        1.33
BT      -26      8680     230               8681     230               8682     230
BT               10000    229.2    0        10300    229.6    0        10400    229.4
BT               10700    230.2             10800    229.9             10900    230.1
BT               11000    230.1             11200    229.9             11300    232.9
BT               11327    233.9             11380    233.9             11400    233.6
BT               11500    231.9             11600    231.5             12000    230.9
BT               12200    231.1             12300    231               12500    231.2
BT               12700    231.2             12800    231.4             12900    231.3
BT               13000    231.4             14371    236.5

NC                                    .1       .3
QT        9      664      1687     2500     3116     3963     4749     5290     6707     10174
X1   19.594      0        0        0        150      150      150

X1   20.021      31       10554    10610    2293     2293     2293
X3                                 7914     231.0
GR      230      5288     229      6017     230      7059     231      7914     231      9561
GR     231.      10000    231.1    10200    231.1    10400    230.8    10500    231.1    10517
GR    232.7      10533    233.7    10546    233.7    10554    230      10563    224.4    10572
GR    223.3      10577    222.9    10584    223.3    10592    231      10600    232.7    10610
GR    231.8      10617    231.9    10700    232.4    10800    232      10900    232.1    11000
GR    231.9      11100    232      11300    235      12000    235      13204    240      13830
GR      245      14250

NC                                    .3       .5
X1   20.102      0        0        0        400      400      400
X3                                 7914     231.0

SB      0.9      1.6      2.6      0        20       1.05     309      1        223      223
X1   20.103      0        0        0        14       14       14
X2        0      0        1        233.5    232      0        0        1.33
X3                                 7914     231.0
BT      -18      5288     230               6017     229               9561     231
BT               10000    231.1             10100    231               10200    231.3
BT               10300    232               10400    232.1             10500    232
BT               10568    234.9             10610    234.9             10700    233.4
BT               10800    232.6             11000    232.4             11100    232.5
BT               11200    232.3             11300    232.6             12000    235.6

NC                                    .1       .3
X1   20.124      0        0        0        100      100      100      0        .1
X3                                 7914     231.0
1
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QT        9      796      1818     2624     3251     3958     4617     5046     6270     9121
X1    20.58      59       12658    12735    2429     2429     2429
X3                                 12000    231.5
GR      230      7908     230      9888     230      9889     230      9890     231      9900
GR    231.5      10000    230.5    10100    230.7    10300    230.6    10400    230.7    10500
GR    230.6      10600    230.6    10700    230.7    10800    230.7    11000    230.9    11100
GR      231      11200    231      11300    230.9    11400    231.1    11500    231.2    11600
GR    231.3      11700    231.5    11800    231.5    12000    231.6    12100    232.2    12200
GR      232      12300    232.1    12400    232.7    12500    233.4    12600    234.0    12644
GR    232.3      12649    234.5    12658    234      12674    231.4    12683    226.7    12692
GR    225.2      12693    225      12700    225.2    12705    229.5    12713    234.1    12719
GR    234.5      12735    234.5    12758    234.5    12800    234.5    12900    234.2    13000
GR    234.2      13100    234.1    13200    233.8    13300    233.7    13400    234.1    13500
GR    234.4      13600    234.5    13700    234.7    13800    234.9    13900    240      14360
GR      240      15721    240      16658    245      17280    250      18325

X1    20.60      59       12658    12758    100      100      100      0        .1
X3                                 12000    231.5
GR      230      7908     230      9888     230      9889     230      9890     231      9900
GR    231.5      10000    230.5    10100    230.7    10300    230.6    10400    230.7    10500
GR    230.6      10600    230.6    10700.   230.7    10800    230.7    11000    230.9    11100
GR      231      11200    231      11300    230.9    11400    231.1    11500    231.2    11600
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GR    231.3      11700      231.5      11800      231.5      12000      231.6      12100      232.2      12200
GR      232      12300      232.1      12400      232.7      12500      233.4      12600      234.0      12644
GR    234.2      12649      234.5      12658      234.1      12674      231.4      12683      226.7      12692
GR    225.2      12693        225      12700      225.2      12705      229.5      12713      234.1      12719
GR    234.5      12735      235.1      12758      234.5      12800      234.5      12900      234.2      13000
GR    234.2      13100      234.1      13200      233.8      13300      233.7      13400      234.1      13500
GR    234.4      13600      234.5      13700      234.7      13800      234.9      13900        240      14360
GR      240      15721        240      16658        245      17280        250      18325

X1   21.059         37      12669      12740       2376       2376       2376
X3                                     12609        233
GR    234.3       8500      234.1      10200      233.5      10400      233.5      10600      233.5      10800
GR    233.5      11000        234      11200      234.2      11400      234.2      11600      234.5      11800
GR    234.5      12000      234.5      12200      234.5      12400      235.7      12600      235.7      12609
GR    235.7      12624      235.7      12625      235.7      12626      235.7      12627        237      12669
GR    236.5      12679      227.9      12687      226.3      12690      225.9      12700      226.3      12708
GR    232.5      12715        236      12726      237.2      12740      236.2      12757      235.2      12800
GR    236.2      13000      236.1      13200      235.7      13400      236.4      13600      236.7      13800
GR    237.1      14000      236.4      14200

X1   21.501         47      11669      11726       2376       2376       2376          0       -.1
X3       10                                     10000      237.1                            237.6      237.8
GR    237.2       8367      237.2       8368      237.2       8369      237.2       8370      237.2       8371
GR    237.2      10000      237.2      10100      237.4      10200      237.2      10400      237.3      10500
GR      237      10600      236.9      10700      237.7      10900      237.4      11000      237.2      11100
GR    237.2      11200      237.1      11300      237.3      11400      237.2      11500      237.6      11600
GR    239.5      11637      239.5      11669      235.1      11679      228.9      11687      227.3      11690
GR    226.8      11700      227.3      11708      233.5      11715      239.2      11726      239.2      11755
GR    238.2      11800      238.3      11900      237.6      12000      238.2      12100      237.8      12200
GR    238.6      12300      238.8      12400      238.3      12500      238.7      12800      238.9      12900
GR    239.1      13000      239.2      13100        239      13200      238.9      13300        240      13470
1
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GR      245      13890        250      14670

NC                                         .3         .5
X1   21.582          0          0          0        400        400        400          0         .1
X3       10                                     10000      237.2                            237.7      237.8

SB       0.9        1.6        2.6          0         30       2.95      447.3       1.19        228        228
X1   21.583          0          0          0         16         16         16
X2        0          0          1      239.1      237.8          0          0       1.33
X3       10                                     10000      237.2                            237.7      237.8
BT      -33       8367      235.3                 8368      235.3                 8369      235.3
BT                10000      237.5                10400      237.9                10500      237.8
BT                10900      237.8                11000      237.9                11100      237.8
BT                11200      237.8                11300        238                11400      238.2
BT                11500        238                11600      238.3                11666      240.7
BT                11723      240.2                11800      238.5                11900      238.5
BT                12000        238                12100      238.6                12200      238.3
BT                12300      238.7                12400        239                12500      238.9
BT                12600      240.2                12632      240.3                12700      240.5
BT                12800      240.8                12900      240.7                13000      240.7
BT                13100      241.2                13200      241.5                13890        245

NC       .09        .09        .05         .1         .3
QT         9        945       1980       2784       3344       3957       4532       4907       6113       8384
X1   21.604                                           100        100        100                   0.1
X3       10                                     10000      237.2                            237.7      237.8

X1   22.009          0          0          0       2112       2112       2112          0        2.2
X3       10                                     10000      237.2                            237.7      237.8

X1    22.45         29      11936      12011       2268       2368       2368
X3                                     10680      244.1
GR      242       9000        242      10680        244      11100      244.1      11200        244      11300
GR    244.4      11400      244.6      11500      244.7      11600        245      11700      245.6      11800
GR      246      11900      246.6      11936      242.7      11949      241.1      11960      231.4      11970
GR    232.2      11978      232.6      11987      240.7      11995      246.5      12011      246.4      12024
GR    246.2      12040        246      12100      245.8      12200      246.3      12300      246.9      12400
GR    246.7      12500      247.1      12600      247.5      12700        248      12800

NC        0          0          0         .3         .5
X1   22.602         38      11636      11711        870        350        800
GR    248.0       9400      247.0      10000      246.8      10200      246.6      10300      246.4      10400
GR    246.2      10500        246      10600      245.6      10700      245.1      10800      244.7      10900
GR    244.5      11000      244.7      11100      244.5      11200        244      11300        245      11400
GR    245.6      11500        246      11600      246.6      11636      242.7      11649      241.1      11660
GR    232.1      11670      232.2      11678      232.6      11687      240.7      11695      246.5      11711
GR    246.4      11724      246.2      11740        246      11800      245.8      11900      246.3      12000
GR    246.9      12100      246.7      12200      247.1      12300      247.1      12500        248      12600
GR    248.5      12700      248.6      12800      248.4      12900
1
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SB     1.05        1.6        2.6          0         25       7.52      498.5       1.79      233.5      233.5
X1   22.603          0          0          0         15         15         15
X2        0          0          1        246      244.1          0          0       1.33
BT      -29      10000      245.2                10100      245.2                10200      245.6
BT                10300      245.2                10400      245.5                10500      245.6
BT                10600      246.1                10700      245.7                10800      245.9
BT                10900      244.9                11000      244.6                11100      244.9
BT                11200      245.4                11300      245.2                11500      245.9
BT                11600      245.7                11700        247                11728        248
BT                11800        248                11900      245.8                12000      246.3
BT                12100      246.9                12200      246.7                12300      247.1
BT                12500      247.1                12600        248                12700      248.5
BT                12800      248.6                12900      248.4

NC        0          0          0         .1         .3
QT        9       1072       2113       2931       3476       4097       4709       5103       6378       8338
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X1   22.644        0        0        0      450      120      225

NC     .09      .09     .055       .3       .5
X1   100.19       59    12363    12440     1000      850      980
GR   251.6    10000    251.5    10100    251.1    10200    250.9    10300    250.9    10400
GR   251.1    10500    250.7    10600    250.6    10700    250.1    10800    249.4    10900
GR   248.8    11000    248.9    11100    249.4    11200    249.1    11300    249.1    11400
GR   249.1    11500    248.6    11600    248.4    11700    247.9    11800    247.9    11900
GR   247.6    12000    247.5    12100    248.3    12200    247.6    12300    247.2    12363
GR   244.0    12377    242.5    12394    241.1    12400    238.8    12407    233.9    12412
GR   232.5    12417    231.9    12420    232.6    12424    233.9    12427    237.5    12430
GR   241.6    12436    246.7    12440    250.6    12447    250.4    12450    248.9    12457
GR   246.6    12461    246.9    12473    246.6    12482    247.0    12485    245.3    12487
GR   245.3    12489    248.5    12493    248.6    12500    248.4    12600    247.9    12700
GR   248.1    12800    248.0    12900    247.7    13000    247.6    13100    247.4    13200
GR   247.5    13300    247.1    13400      247    13500    248.4    14300

X1   100.64       44    11851    12008     2011     2172     2376
X3       10                                                    256    255.6
GR   256.0     9578    253.0    10100    253.0    10200    253.0    10300    253.1    10400
GR   252.9    10500    253.2    10600    252.7    10700    252.4    10800    252.1    10900
GR   252.6    11000    252.0    11100    253.4    11200    253.2    11300    252.8    11400
GR   253.0    11500    253.2    11600    253.1    11700    253.3    11800    254.4    11851
GR   249.5    11861    249.8    11877    243.4    11881    239.8    11891    239.4    11895
GR   239.5    11898    239.7    11900    240.1    11905    245.2    11922    246.6    11953
GR   247.5    11992    248.0    12000    251.1    12008    253.6    12100    253.7    12200
GR   253.6    12300    253.2    12400    252.4    12500    252.0    12600    251.8    12700
GR   251.8    12800    251.6    12900    251.7    13000    255.0    14228

SB       .9      1.5      2.5        0    28.33     6.12    908.4     3.62    240.5    240.5
X1   100.64        0        0        0       10       10       10
X2        0        0        1    253.5    255.5
X3       10                                                    256    255.6
BT       10     9578    256.0        0    11000    256.0        0    11600    255.6        0
BT    11930    255.5        0    12000    255.6        0    12400    255.7        0    12600
BT    255.6        0    12700    255.6        0    12800    255.5        0    14228    255.0
BT        0
1
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X1   100.75                                 300.      450      581                .8

X1   101.08       65    12043    12126     1650     1250     1742
X3       10                                                 258.9   256.45
GR     260     9655      260     9656      260     9657      260     9658      260     9659
GR   258.2    10000    257.9    10100    257.8    10200    257.8    10300    258.0    10400
GR   257.8    10500    257.8    10600    257.7    10700    258.1    10800    258.2    10900
GR   258.3    11000    258.1    11100    258.0    11200    258.3    11300    258.3    11400
GR   258.0    11500    257.7    11600    258.4    11700    257.5    11800    256.8    11900
GR   257.9    12000    259.1    12043    255.6    12048    253.2    12054    251.9    12068
GR   248.2    12072    244.7    12077    242.3    12084    244.7    12091    246.8    12098
GR   250.6    12102    252.4    12113    254.8    12119    258.3    12126    258.0    12200
GR   258.3    12279    258.1    12300    258.1    12400    257.9    12500    257.7    12600
GR   256.9    12700    255.8    12800    255.8    12900    255.5    13000    255.2    13100
GR   255.4    13200    255.6    13300    254.6    13400    254.8    13500    254.6    13600
GR   255.6    13700    255.4    13800    255.5    13900    255.5    13955    256.3    14000
GR     260    14500      260    14501      260    14502      260    14503      260    14504

SB       .9      1.5      2.5        0    22.6      2.6    796.4      3.0    244.5    244.5
X1   101.09        0        0        0      44       44       44
X2        0        0        1    257.8    256.7
X3       10                                                    259   256.90
BT       15     9655    261.1        0    10400    260.6        0    10600    260.6        0
BT    10700    260.6        0    11200    259.3        0    11600    258.9        0    11900
BT    259.0        0    12050    259.5        0    12160    259.5        0    12200    259.1
BT        0    12600    258.6        0    13400    256.7        0    13500    256.7        0
BT    14000    257.7        0    14504      260        0

X1   101.22                                 690      700      739                1.8

NC                        .06
X1   101.78       88    11557    11613     2350     2100     2957
X3       10                                                 265.0   261.8
GR   268.7    10000    267.1    10100    266.0    10120    266.0    10134    266.0    10136
GR   266.0    10144    266.0    10152    266.0    10200    265.4    10276    264.2    10300
GR   265.2    10400    265.3    10500    265.2    10600    264.8    10700    264.9    10800
GR   264.9    10900    265.0    11000    265.1    11100    265.4    11200    265.8    11300
GR   266.0    11319    266.0    11400    266.1    11500    265.3    11557    261.6    11569
GR   258.1    11581    254.7    11585    253.8    11591    253.0    11597    253.4    11600
GR   254.7    11603    257.7    11607    264.3    11613    264.2    11700    265.0    11800
GR   264.7    11900    264.5    12000    264.3    12100    263.8    12200    263.6    12300
GR   263.6    12400    263.5    12500    262.9    12600    263.2    12700    263.7    12764
GR   261.9    12766    261.9    12767    263.6    12770    264.2    12778    263.8    12786
GR   263.2    12788    263.1    12789    264.5    12792    263.1    12800    263.3    12900
GR   263.2    13000    262.8    13100    262.8    13200    262.7    13300    263.1    13400
GR   261.6    13500    261.7    13600    261.6    13700    262.3    13800    263.0    13900
GR   263.7    14000    264.5    14087    264.8    14100    265.3    14200    265.7    14300
GR   266.2    14400    267.4    14490    266.0    14492    266.3    14493    266.3    14495
GR   266.3    14502    266.0    14504    267.2    14507    266.7    14600    266.6    14700
GR   266.3    14800    266.6    14900    266.2    15000    266.4    15100    266.7    15200
GR   266.3    15300    265.9    15400    270.0    16251
1
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SB       .90      1.5      2.0        0    11.83     1.74    321.6     1.91    253.5    253.5
X1   101.79        0        0        0       23       23       23
X2        0        0        1    264.1    262.0
X3       10                                                 265.0      262
BT       25    10000    268.6        0    10100    267.5        0    10360    265.0        0
BT    11000    265.0        0    11300    266.0        0    11500    266.1        0    11560
BT    265.5        0    11620    265.5        0    11700    264.3        0    11800    265.0
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BT       0      12600      263.0         0      12800      266.0         0      13300      262.7         0
BT   13400      263.1          0     13450      262.2          0     13760      262.1          0     14140
BT     265.0        0      14340      266.0         0      14400      266.6         0      14430      267.6
BT       0      14600      266.7         0      15000      266.3         0      15200      266.7         0
BT   15400      266.0          0     16251      270.0          0

QT       9        852       1687       2419       2874       3366       3849       4160       5104       6170
X1   101.9                                          634        634        634                   1.6

X1   102.32        55      12500      12600       2200       2200       2218
GR     290.3     10000      287.9      10100      285.5      10200      284.2      10300      283.1      10400
GR     281.3     10500      279.5      10600      278.4      10700      277.3      10800      275.9      10900
GR     274.8     11000      274.8      11016      276.4      11026      278.5      11066      277.3      11100
GR     275.5     11167      273.0      11181      273.4      11200      273.1      11226      271.4      11300
GR     271.8     11400      272.2      11421      272.1      11427      272.1      11430      272.1      11432
GR     272.1     11440      271.3      11500      270.6      11600      269.9      11700      269.9      11800
GR     269.8     11900      270.1      12000      270.4      12100      270.1      12200      270.4      12300
GR     270.4     12400      270.8      12500      269.2      12541      264.8      12547      260.1      12555
GR     257.6     12558      257.9      12561      258.4      12564      260.1      12567      265.0      12584
GR     269.2     12593      271.4      12600      271.0      12700      271.0      12800      270.8      12900
GR     271.2     13000      274.5      13100      279.6      13200      283.3      13300      287.8      13400

X1   102.60         0          0          0       1478       1478       1478          0        3.7

X1   102.90        66      11055      11098       1185       1347       1585          0       -1.2
GR     301.9     10000      296.8      10100      292.2      10200      288.5      10300      286.4      10400
GR     283.7     10500      283.6      10600      284.6      10652      283.2      10700      279.6      10800
GR     280.3     10900      280.3      10910      278.2      11000      277.3      11055      273.2      11061
GR     270.7     11063      267.2      11071      266.5      11076      267.2      11079      270.5      11085
GR     274.3     11091      276.3      11093      279.0      11098      278.2      11200      277.3      11300
GR     278.0     11400      278.0      11406      278.0      11414      278.0      11422      278.0      11430
GR     278.0     11431      278.0      11433      278.0      11437      278.0      11446      278.3      11458
GR     277.8     11500      277.5      11600      277.8      11700      277.7      11800      277.8      11900
GR     277.8     12000      278.2      12020      279.3      12165      279.0      12200      281.6      12300
GR     278.1     12400      277.3      12500      277.3      12600      277.4      12700      276.7      12800
GR     276.9     12900      277.6      12916      277.5      12923      277.5      12928      277.5      12934
GR     277.5     12937      277.5      12944      277.5      12954      277.3      13000      279.3      13100
GR     279.5     13107      281.0      13200      285.2      13300      285.5      13319      290.1      13400
GR     294.1     13500

NC      .09        .09        .06         .3         .5
X1   102.93         14      10000      10120        175         75        150
GR       300       8750        290       8900        280       9550      276.4      10000      276.1      10051
GR     268.6     10065      263.9      10078      263.3      10082      264.3      10083      269.5      10105
GR     276.8     10120        280      10870        290      11770        300      11945
1
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X1   102.95          0          0          0        100        180        100
X3       10          0          0          0          0          0          0      279.0      277.6

SB     1.25       1.56        2.5          0         44       0.01        484          0      264.4      264.3
X1   102.96          0          0          0         70         70         70
X2        0          0          1      274.4      279.4
X3       10          0          0          0          0          0          0      279.9      278.2
BT       -5       8200      279.9          0       8500      280.1          0       8900      281.0          0
BT                9000      281.4          0      10189      278.2

X1   102.97         14      10050      10190        200        200        100
GR       300       8800        290       9000        280       9500      278.1      10000      275.8      10050
GR     269.9     10071      264.8      10091      264.5      10128      265.3      10166      269.8      10167
GR     277.7     10190        280      10690        290      11790        300      11990

X1   102.98          0          0          0         50         50         50
X3       10          0          0          0          0          0          0      279.4      278.0

SB     1.25       1.56        2.5          0         30       0.01        300          0      265.0      264.7
X1   102.99          0          0          0        134        134        134
X2        0          0          1      274.1      278.5
X3       10          0          0          0          0          0          0      280.4      278.5
BT       -7       9475      284.6          0       9550      283.0          0       9600      282.2          0
BT                9700      281.5          0       9850      280.4          0       9900      279.5          0
BT               10300      278.5

X1   103.00         15      10050      10152        100        100        100
GR       300       8800        290       9000        280       9700      277.9      10000      275.5      10050
GR     269.3     10069      265.4      10080      266.0      10097      265.7      10115      272.6      10136
GR     277.6     10152      281.2      10172        280      10622        290      11622        300      11822

X1   103.01          0          0          0        100        100        100
X3       10          0          0          0          0          0          0      279.6      279.6

SB     1.25       1.56        2.5          0         27       0.01        243          0      265.9      265.9
X1   103.02          0          0          0        132        132        132
X2        0          0          1      275.4      281.9
X3       10          0          0          0          0          0          0      282.0      281.9
BT       -4       9600      286.8          0       9750      283.0          0       9950      282.0          0
BT               11100      281.9          0

X1   103.03         14      10100      10157        100        100        100
GR       300       8900        290       9125        280       9575      277.5      10000      278.0      10100
GR     266.2     10135      264.1      10138      266.1      10142      278.6      10157      277.7      10207
GR     277.8     10257        280      10707        290      11707        300      11957

NC      .09        .09       .055
QT       9        640       1165       1531       1742       1985       2198       2378       2857       2776
X1   103.04         12        230        266        250        400        200
GR     282.0          0      280.0        200        278        230      272.6        232      268.5        247
GR     267.7        250      268.5        254      272.5        258      278.0        266      280.0        860
GR     282.0        960      284.0       1540
1
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NH       4       .09     10525      .055     10565      .09     10950      500     11700
X1   103.19        20     10525     10565       350      750       792
GR    279.6     10000     279.0     10200     279.2    10400     279.6    10500     280.5    10525
GR    279.3     10526     276.5     10535     271.5    10544     271.3    10547     271.5    10552
GR    280.5     10565     279.5     10600     279.4    10700     280.0    10850     280.4    10950
GR    281.3     11100     284.2     11250     286.3    11400     290.7    11550     295.5    11700

NH       5       500     10200       .09     10517      .055     10551      .09     11000      500
NH   11700
X1   103.23        27     10517     10551       211      211       211
X3       10                                                              281.3     281.3
GR    292.4     10000     288.3     10100     285.3    10200     281.4    10300     281.0    10400
GR    280.7     10500     280.1     10517     276.3    10525     273.0    10533     272.9    10538
GR    272.9     10540     272.8     10543     273.0    10546     276.5    10549     279.6    10551
GR    279.4     10600     280.3     10700     280.7    10800     280.2    10900     280.4    11000
GR    280.6     11100     281.6     11200     283.7    11300     286.5    11400     291.2    11500
GR    295.5     11600     300.0     11700

SB       .9       1.5       3.0         0        27      .01       162        0     271.8     271.8
X1   103.24         0         0         0       180      180       180
X2        0         0         1     277.8     284.7
X3       10                                                              284.6     284.8
BT       12     10000     292.4         0     10050    290.4         0    10100     288.4         0
BT    10225     284.5         0     10500     284.8        0     10600    284.7         0     10900
BT    285.1         0     11000     285.5         0    11100     286.4        0     11200     287.8
BT        0     11610     296.0         0     11700      300         0

NC      .09       .09      .055
X1   103.4         16       480       548      1020      700       898
GR     292          0       290       170       288      240       286       340       284       415
GR     282        480     279.5       491     276.2      508     275.9       530       282       548
GR     282        560       284       640       286      810       288       940       290      1060
GR     292       1160

NC      .09       .09      .055
X1   103.69         35     11708     11791      1600     1350      1531
GR    306.6     10690     296.5     10890     297.3    10990     290.3    11090     289.7    11144
GR    288.4     11200     288.4     11300     288.5    11400     289.1    11500     288.7    11600
GR    289.1     11700     289.2     11708     285.9    11724     282.1    11733     281.3    11743
GR    281.0     11749     281.3     11756     281.6    11762     285.1    11772     288.8    11791
GR    288.4     11800     288.3     11900     288.1    11975     288.2    12000     288.2    12100
GR    288.1     12200     288.1     12300     291.0    12400     297.0    12500     298.6    12600
GR    298.2     12700     298.5     12800     302.6    12900     304.2    12979     306.1    13000

SB       .9       1.5       1.7         0        28      .01       183       .15       281       281
X1   103.70         0         0         0        35       35        35
X2        0         0         1     287.3     288.0
BT       24     10690     306.6         0     10691    306.6         0    10692     306.6         0
BT    10890     296.5         0     10990     297.3        0     11090    290.3         0     11142
BT    290.5         0     11142     290.5         0    11142     290.5        0     11142     290.5
BT        0     11200       289         0     11300    287.5         0    11500     289.1         0
BT    11600     288.6         0     11700     289.1        0     11980    288.0         0     12300
BT    288.0         0     12400     291.0         0    12500     297.0        0     12600     298.5
1
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BT        0     12800     298.5         0     12900    302.5         0    12980     304.2         0
BT    13000     306.1         0

NC      .09       .09       .05
X1   103.85         34     10747     10821         1     1045       845
GR    306.5     10000     301.4     10100     296.5    10200     297.3    10300     290.2    10400
GR    289.6     10455     289.9     10500     289.1    10600     289.3    10700     289.7    10747
GR    286.3     10757     282.5     10765     282.2    10772     282.5    10777     283.0    10784
GR    283.1     10788     285.4     10800     290.2    10821     290.7    10900     291.1    11000
GR    290.9     11038     292.3     11100     293.6    11200     297.4    11300     298.0    11334
GR    298.6     11400     299.1     11500     299.7    11600     300.9    11700     301.9    11800
GR    302.3     11900     301.9     11932     304.0    12000     305.3    12071

SB       .9       1.5       2.5         0        28      .01       153       .05       282       282
X1   103.86         0         0         0        35       35        35
X2        0         0         1     287.4     289.1
BT       23     10000     306.5         0     10200    296.5         0    10300     297.3         0
BT    10400     290.2         0     10455     289.6        0     10500    289.9         0     10600
BT    289.1         0     10700     289.3         0    10745     289.4        0     10820     290.2
BT        0     10900     290.7         0     11000    291.1         0    11080     291.0         0
BT    11100     294.8         0     11200     293.6        0     11300    297.5         0     11400
BT    298.5         0     11500     299.1         0    11600     299.7        0     11800     301.9
BT        0     11930       302         0     12000    304.0         0    12070     305.2         0

QT        9       377       718       950      1102     1301      1477      1627      1984      1897
X1   103.92         16       740       805       430      390       370
GR     300          0       298        80       296      130       294       230       292       355
GR    290.8        545     290.6       740       284      762       284       778     284.7       786
GR    291.0        805       292      1135       294     1145       296      1155       298      1160
GR    300.0       1170

X1    104.0         15       610       661       400      400       422
GR     300          0       298       160       296      250       294       430       292       510
GR     292        610     286.4       625     286.0      630     287.0       645       292       661
GR     292        701       294       986       296     1021       298      1061       300      1101

NC       .1        .1       .05
X1   104.13         47     11887     11911       630      550       686
X3       10                                                              296       296
GR    311.2     10000     308.0     10100     309.4    10200     308.8    10300     308.8    10313
GR    305.8     10320     301.9     10325     301.8    10327     301.9    10329     305.4    10332
GR    308.3     10338     308.8     10400     307.5    10500     305.8    10600     303.8    10700
GR    303.8     10721     304.3     10800     304.8    10900     303.6    11000     302.8    11100
GR    300.9     11200     300.0     11300     299.6    11400     299.0    11500     298.5    11600
GR    297.3     11700     296.8     11800     295.8    11887     292.3    11892     290.0    11900
GR    288.9     11902     288.8     11904     289.2    11907     290.0    11909     291.8    11911
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GR	294.7	11913	295.8	12000	296.7	12100	298.0	12200	298.1	12276
GR	299.6	12300	301.2	12400	301.8	12500	302.9	12600	305.0	12700
GR	309.0	12800	310.9	12900						

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SB	.9	1.5	2.5	0	20	.01	80	0	290	290
X1	104.14	0	0	0	33	33	33			
X2	0	0	1	294.0	296.5					
X3	10							297	296.5	
BT	21	10000	311.0	0	10200	309.8	0	10300	309.5	0
BT	10600	307.2	0	10720	306.4	0	10820	305.4	0	11100
BT	303.2	0	11300	301.0	0	11500	299.8	0	11700	298.1
BT	0	11905	296.7	0	12000	296.5	0	12110	297.0	0
BT	12200	298.0	0	12280	298.3	0	12300	299.7	0	12400
BT	301.3	0	12500	302.0	0	12735	306.5	0	12800	309.0
BT	0	12900	311.0	0						
X1	104.21	28	11120	11140	400	400	422			
GR	317.1	10000	313.6	10100	311.5	10166	310.6	10200	308.0	10300
GR	305.2	10343	304.6	10400	304.3	10420	303.3	10500	301.3	10600
GR	300.9	10623	298.4	10700	296.7	10800	296.5	10869	296.3	10900
GR	296.9	11000	297.3	11100	297.9	11120	295.9	11124	291.0	11125
GR	290.9	11127	291.1	11129	295.1	11134	297.5	11140	298.2	11200
GR	302.8	11300	308.4	11400	312.8	11453				
SB	.9	1.5	2.5	0	4.71	.01	23.55	0	291.4	291.4
X1	104.22	0	0	0	34	34	34			
X2	0	0	1	296.4	296.4					
BT	21	10000	317.4	0	10100	313.6	0	10300	308.1	0
BT	10315	307.0	0	10345	306.3	0	10385	304.9	0	10500
BT	303.3	0	10623	301.0	0	10693	298.6	0	10800	297.2
BT	0	10905	296.4	0	11100	297.3	0	11120	298.0	0
BT	11122	296.8	0	11138	296.9	0	11140	297.5	0	11175
BT	298.0	0	11200	298.6	0	11307	303.2	0	11400	308.5
BT	0	11453	312.8	0						
X1	104.27	13	515	526	320	340	343			
GR	306.0	0	304	40	302	125	300	230	298	335
GR	297.7	515	293.3	518	293.3	520	294.0	522	298.0	526
GR	300	550	302	625	304	700				
X1	104.34	18	10493	10508	290	360	343			
GR	309.4	10000	306.5	10100	302.3	10200	300.4	10300	299.6	10400
GR	299.6	10493	297.2	10498	295.8	10500	295.4	10503	295.7	10505
GR	297.6	10506	299.6	10508	300.4	10600	301.8	10672	302.2	10700
GR	306.3	10800	312.7	10900	315.3	10967				
SB	.9	1.5	2.3	0	8.5	.01	21.25	0	295.9	295.9
X1	104.35	0	0	0	34	34	34			
X2	0	0	1	298.4	299.7					
BT	13	10000	309.4	0	10100	306.5	0	10200	302.3	0
BT	10300	300.6	0	10350	300.0	0	10500	299.7	0	10600
BT	300.6	0	10675	302.2	0	10700	303.0	0	10800	308.0
BT	0	10875	311.3	0	10900	312.8	0	10967	315.5	0

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THIS RUN EXECUTED 05FEB13 19:26:28

****
HEC-2 WATER SURFACE PROFILES

Version 4.6.2; May 1991
****

NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST

EXISTING CONDITIONS, A

SUMMARY PRINTOUT

SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
17.421	227.08	.00	486.00	58.56	427.44	.00	.00	.00	.14	1.81	.00	218.80
17.421	227.57	.00	1331.00	828.89	460.58	41.53	.00	.00	.26	1.79	.19	218.80
17.421	227.86	.00	2207.00	1614.52	481.15	111.33	.00	.00	.33	1.77	.26	218.80
17.421	228.01	.00	2777.00	2120.25	496.30	160.45	.00	.00	.37	1.78	.30	218.80
17.421	228.15	.00	3384.00	2658.27	510.08	215.65	.00	.00	.40	1.79	.33	218.80
17.421	228.30	.00	4087.00	3274.00	531.12	281.89	.00	.00	.44	1.81	.37	218.80
17.421	228.42	.00	4680.00	3790.74	549.65	339.61	.00	.00	.46	1.84	.39	218.80
17.421	228.74	.00	6423.00	5308.28	596.04	518.68	.00	.00	.53	1.89	.45	218.80
17.421	229.51	.00	11670.00	9838.94	728.37	1102.69	.00	.00	.68	2.05	.58	218.80
17.502	227.27	.00	486.00	117.70	367.85	.46	.00	.00	.12	1.53	.04	218.90
17.502	227.75	.00	1331.00	885.10	395.44	50.46	.00	.00	.24	1.51	.18	218.90
17.502	228.03	.00	2207.00	1658.04	427.96	121.00	.00	.00	.31	1.55	.25	218.90
17.502	228.19	.00	2777.00	2159.67	446.55	170.78	.00	.00	.34	1.58	.28	218.90
17.502	228.33	.00	3384.00	2691.94	465.61	226.44	.00	.00	.38	1.60	.32	218.90
17.502	228.48	.00	4087.00	3302.42	491.38	293.20	.00	.00	.41	1.65	.35	218.90
17.502	228.60	.00	4680.00	3816.97	511.66	351.37	.00	.00	.44	1.68	.37	218.90
17.502	228.93	.00	6423.00	5328.44	563.48	531.08	.00	.00	.50	1.76	.43	218.90
17.502	229.70	.00	11670.00	9850.26	701.15	1118.59	.00	.00	.65	1.95	.56	218.90
17.503	227.27	.00	486.00	111.91	373.75	.35	61.57	421.33	.12	1.55	.04	218.90
17.503	227.75	.00	1331.00	880.24	401.11	49.64	83.53	1245.12	.24	1.53	.18	218.90

	17.503	228.03	.00	2207.00	1654.87	431.87	120.26	103.82	2114.10	.31	1.57	.25	218.90
	17.503	228.19	.00	2777.00	2157.11	449.81	170.08	115.32	2674.47	.35	1.59	.29	218.90
*	17.503	228.33	.00	3384.00	2690.14	468.05	225.81	100.91	3290.24	.38	1.61	.32	218.90
*	17.503	228.48	.00	4087.00	3301.04	493.34	292.62	107.84	4012.49	.41	1.66	.35	218.90
*	17.503	228.60	.00	4680.00	3815.87	513.27	350.86	112.64	4584.32	.44	1.69	.37	218.90
	17.503	228.93	.00	6423.00	5328.02	564.17	530.81	125.27	6322.42	.50	1.76	.43	218.90
	17.503	229.70	.00	11670.00	9850.43	700.73	1118.84	153.60	11627.07	.65	1.95	.56	218.90

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	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	17.524	227.31	.00	486.00	134.62	350.48	.90	.00	.00	.12	1.45	.04	218.90
	17.524	227.79	.00	1331.00	899.53	378.54	52.93	.00	.00	.23	1.44	.18	218.90
	17.524	228.07	.00	2207.00	1670.89	412.07	124.04	.00	.00	.30	1.49	.25	218.90
	17.524	228.22	.00	2777.00	2171.65	431.21	174.13	.00	.00	.34	1.52	.28	218.90
	17.524	228.37	.00	3384.00	2701.87	452.09	230.04	.00	.00	.37	1.55	.31	218.90
	17.524	228.52	.00	4087.00	3311.63	478.27	297.10	.00	.00	.40	1.60	.34	218.90
	17.524	228.64	.00	4680.00	3825.66	498.82	355.52	.00	.00	.43	1.63	.36	218.90
	17.524	228.97	.00	6423.00	5335.71	551.46	535.83	.00	.00	.49	1.71	.42	218.90
	17.524	229.74	.00	11670.00	9854.50	690.43	1125.07	.00	.00	.64	1.91	.55	218.90
*	18.481	228.39	.00	486.00	101.23	228.01	156.75	.00	.00	.13	.98	.15	220.30
	18.481	229.00	.00	1331.00	494.56	292.69	543.75	.00	.00	.22	1.15	.24	220.30
	18.481	229.39	.00	2207.00	931.32	334.66	941.02	.00	.00	.28	1.24	.29	220.30
	18.481	229.60	.00	2777.00	1224.61	344.38	1208.01	.00	.00	.32	1.23	.32	220.30
	18.481	229.80	.00	3384.00	1551.51	338.24	1494.25	.00	.00	.34	1.17	.34	220.30
	18.481	230.00	.00	4087.00	1969.62	288.80	1828.58	.00	.00	.35	.96	.37	220.30
	18.481	230.14	.00	4680.00	2307.50	281.30	2091.20	.00	.00	.36	.89	.39	220.30
	18.481	230.50	.00	6423.00	3294.46	320.05	2808.49	.00	.00	.40	.91	.44	220.30
	18.481	231.35	.00	11670.00	6342.00	469.01	4858.99	.00	.00	.50	1.08	.55	220.30
	18.562	228.45	.00	486.00	94.14	240.69	151.17	.00	.00	.13	1.05	.15	220.40
	18.562	229.07	.00	1331.00	488.61	300.81	541.59	.00	.00	.22	1.18	.24	220.40
	18.562	229.48	.00	2207.00	927.62	339.71	939.67	.00	.00	.29	1.26	.29	220.40
	18.562	229.69	.00	2777.00	1221.17	349.66	1206.17	.00	.00	.32	1.25	.32	220.40
	18.562	229.89	.00	3384.00	1547.30	343.15	1493.55	.00	.00	.34	1.19	.35	220.40
	18.562	230.09	.00	4087.00	1967.03	291.67	1828.31	.00	.00	.35	.97	.37	220.40
	18.562	230.24	.00	4680.00	2305.62	282.68	2091.70	.00	.00	.36	.90	.40	220.40
	18.562	230.59	.00	6423.00	3291.20	321.18	2810.61	.00	.00	.40	.92	.45	220.40
	18.562	231.45	.00	11670.00	6344.28	468.34	4857.38	.00	.00	.50	1.08	.55	220.40
	18.563	228.45	.00	486.00	94.18	240.62	151.20	486.00	.00	.13	1.05	.15	220.40
	18.563	229.16	.00	1331.00	509.32	272.67	549.01	593.78	737.09	.21	1.06	.22	220.40
	18.563	229.49	.00	2207.00	931.76	334.05	941.19	292.29	1918.75	.28	1.23	.29	220.40
	18.563	229.70	.00	2777.00	1224.24	344.95	1207.81	238.79	2559.77	.32	1.23	.32	220.40
*	18.563	229.90	.00	3384.00	1550.17	340.05	1493.78	201.56	3189.64	.34	1.18	.35	220.40
*	18.563	230.10	.00	4087.00	1969.12	289.35	1828.53	173.01	3906.34	.35	.96	.37	220.40
*	18.563	230.24	.00	4680.00	2307.37	281.39	2091.23	173.75	4513.52	.36	.89	.39	220.40
	18.563	230.59	.00	6423.00	3292.88	320.60	2809.52	141.37	6337.90	.40	.92	.44	220.40
	18.563	231.45	.00	11670.00	6346.37	467.72	4855.91	152.76	11571.57	.50	1.07	.55	220.40
	18.584	228.47	.00	582.00	116.32	281.79	183.89	.00	.00	.16	1.22	.18	220.40
	18.584	229.18	.00	1560.00	600.12	315.28	644.59	.00	.00	.24	1.22	.26	220.40
	18.584	229.51	.00	2409.00	1020.56	359.82	1028.62	.00	.00	.31	1.32	.31	220.40
	18.584	229.72	.00	2963.00	1310.82	360.95	1291.23	.00	.00	.34	1.29	.34	220.40
	18.584	229.92	.00	3679.00	1696.07	354.84	1628.10	.00	.00	.36	1.22	.37	220.40
	18.584	230.12	.00	4491.00	2171.70	309.36	2009.94	.00	.00	.38	1.02	.41	220.40
	18.584	230.26	.00	5114.00	2528.31	302.45	2283.24	.00	.00	.39	.96	.43	220.40
	18.584	230.62	.00	6732.00	3457.78	333.78	2940.44	.00	.00	.41	.95	.46	220.40
	18.584	231.47	.00	10959.00	5965.64	437.49	4555.87	.00	.00	.46	1.00	.51	220.40

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	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	19.451	229.70	.00	582.00	176.67	314.55	90.77	.00	.00	.21	1.40	.22	222.20
	19.451	230.30	.00	1560.00	900.86	345.31	313.83	.00	.00	.25	1.38	.29	222.20
	19.451	230.64	.00	2409.00	1571.68	351.04	486.28	.00	.00	.29	1.32	.31	222.20
	19.451	230.83	.00	2963.00	2002.70	357.91	602.39	.00	.00	.31	1.31	.32	222.20
	19.451	231.05	.00	3679.00	2553.65	366.45	758.89	.00	.00	.33	1.29	.34	222.20
	19.451	231.26	.00	4491.00	3168.13	380.00	942.86	.00	.00	.36	1.29	.35	222.20
	19.451	231.41	.00	5114.00	3635.56	391.52	1086.92	.00	.00	.38	1.30	.37	222.20
	19.451	231.75	.00	6732.00	4865.73	388.03	1478.24	.00	.00	.43	1.22	.41	222.20
	19.451	232.50	.00	10959.00	7999.13	418.07	2541.80	.00	.00	.52	1.13	.48	222.20
	19.562	229.89	.00	582.00	176.65	314.59	90.76	.00	.00	.21	1.40	.22	222.40
	19.562	230.48	.00	1560.00	892.49	353.81	313.70	.00	.00	.25	1.42	.29	222.40
	19.562	230.80	.00	2409.00	1554.08	369.06	485.87	.00	.00	.30	1.40	.33	222.40
	19.562	230.99	.00	2963.00	1987.22	374.91	600.87	.00	.00	.32	1.38	.34	222.40
	19.562	231.20	.00	3679.00	2538.87	384.35	755.78	.00	.00	.35	1.37	.35	222.40
	19.562	231.41	.00	4491.00	3156.84	395.80	938.36	.00	.00	.37	1.36	.37	222.40
	19.562	231.56	.00	5114.00	3625.84	406.09	1082.07	.00	.00	.39	1.36	.38	222.40
	19.562	231.90	.00	6732.00	4856.71	403.91	1471.38	.00	.00	.44	1.28	.42	222.40
	19.562	232.65	.00	10959.00	8002.16	424.46	2532.38	.00	.00	.53	1.16	.49	222.40
	19.563	229.89	.00	582.00	176.76	314.43	90.81	582.00	.00	.21	1.40	.22	222.40
	19.563	230.48	.00	1560.00	894.39	351.87	313.73	116.22	1449.78	.25	1.41	.29	222.40
	19.563	230.80	.00	2409.00	1559.01	364.04	485.96	138.76	2283.05	.29	1.38	.32	222.40
*	19.563	230.99	.00	2963.00	1990.86	370.99	601.15	152.40	2826.04	.32	1.36	.34	222.40
*	19.563	231.20	.00	3679.00	2541.10	381.69	756.21	167.20	3513.35	.34	1.36	.35	222.40
*	19.563	231.41	.00	4491.00	3157.38	395.06	938.57	181.21	4314.04	.37	1.36	.37	222.40
*	19.563	231.56	.00	5114.00	3626.23	405.50	1082.27	190.17	4926.14	.39	1.36	.38	222.40
	19.563	231.90	.00	6732.00	4858.25	401.24	1472.51	212.08	6522.56	.44	1.27	.41	222.40
	19.563	232.65	.00	10959.00	8001.40	422.78	2534.82	205.35	10821.03	.53	1.16	.49	222.40
	19.594	229.94	.00	664.00	214.92	339.11	109.97	.00	.00	.23	1.50	.24	222.40
	19.594	230.52	.00	1687.00	988.38	359.05	339.57	.00	.00	.26	1.43	.30	222.40
	19.594	230.85	.00	2500.00	1632.70	362.60	504.70	.00	.00	.30	1.37	.32	222.40
	19.594	231.03	.00	3116.00	2105.49	377.09	633.42	.00	.00	.33	1.38	.34	222.40
	19.594	231.24	.00	3963.00	2746.85	399.56	816.59	.00	.00	.36	1.41	.37	222.40

SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
104.350	300.42	.00	377.00	111.72	238.31	26.97	59.70	319.74	.94	4.80	.69	295.40
104.350	301.09	.00	718.00	319.30	280.30	118.39	35.56	684.30	1.23	4.71	1.06	295.40
104.350	301.40	.00	950.00	455.60	310.40	184.00	33.82	916.51	1.36	4.83	1.19	295.40
104.350	301.58	.00	1102.00	544.11	329.85	228.03	33.62	1069.55	1.44	4.93	1.26	295.40
104.350	301.80	.00	1301.00	660.46	352.74	287.81	33.54	1267.84	1.52	5.02	1.34	295.40
104.350	301.97	.00	1477.00	760.99	372.12	343.89	33.98	1450.10	1.58	5.11	1.41	295.40
104.350	302.10	.00	1627.00	846.45	388.02	392.53	33.96	1592.97	1.63	5.19	1.46	295.40
104.350	302.40	.00	1984.00	1050.09	423.39	510.52	34.49	1954.18	1.73	5.34	1.57	295.40
104.350	302.33	.00	1897.00	999.96	415.19	481.85	34.37	1867.39	1.71	5.31	1.54	295.40

EXISTING CONDITIONS, A

SUMMARY PRINTOUT

	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	17.421	227.08	486.00	.00	.00	.00	.00	.08	643.17	4867.03	.00	.00
	17.421	227.57	1331.00	.00	.00	.49	.00	-17.43	3718.27	6516.52	.00	.00
	17.421	227.86	2207.00	.00	.00	.28	.00	-18.14	5582.53	6600.26	.00	.00
	17.421	228.01	2777.00	.00	.00	.15	.00	-17.99	6567.96	6655.87	.00	.00
	17.421	228.15	3384.00	.00	.00	.14	.00	-18.85	7533.35	6714.29	.00	.00
	17.421	228.30	4087.00	.00	.00	.15	.00	-18.70	8547.62	6751.52	.00	.00
	17.421	228.42	4680.00	.00	.00	.12	.00	-18.58	9346.20	6771.94	.00	.00
	17.421	228.74	6423.00	.00	.00	.32	.00	-19.26	11544.10	6827.81	.00	.00
	17.421	229.51	11670.00	.00	.00	.76	.00	-20.49	16807.54	6959.79	.00	.00
	17.502	227.27	486.00	.00	.00	.00	.19	.00	1235.50	6073.15	400.00	8.63
	17.502	227.75	1331.00	.00	.00	.48	.18	.00	4279.87	6541.86	400.00	36.72
	17.502	228.03	2207.00	.00	.00	.28	.18	.00	6146.69	6630.21	400.00	53.85
	17.502	228.19	2777.00	.00	.00	.15	.18	.00	7152.06	6691.28	400.00	62.99
	17.502	228.33	3384.00	.00	.00	.15	.18	.00	8128.97	6740.80	400.00	71.91
	17.502	228.48	4087.00	.00	.00	.15	.18	.00	9154.48	6767.04	400.00	81.28
	17.502	228.60	4680.00	.00	.00	.12	.18	.00	9960.08	6787.59	400.00	88.64
	17.502	228.93	6423.00	.00	.00	.32	.18	.00	12152.70	6843.20	400.00	108.80
	17.502	229.70	11670.00	.00	.00	.77	.19	.00	17459.40	6975.96	400.00	157.33
	17.503	227.27	486.00	226.90	228.30	.00	.00	.00	1182.35	6042.09	14.00	9.01
	17.503	227.75	1331.00	226.90	228.30	.48	.00	.00	4225.48	6539.41	14.00	38.09
	17.503	228.03	2207.00	226.90	228.30	.28	.00	.00	6101.27	6627.44	14.00	55.82
	17.503	228.19	2777.00	226.90	228.30	.15	.00	.00	7110.31	6688.75	14.00	65.29
*	17.503	228.33	3384.00	226.90	228.30	.15	.00	.00	8091.74	6739.84	14.00	74.52
*	17.503	228.48	4087.00	226.90	228.30	.15	.00	.00	9122.27	6766.22	14.00	84.21
*	17.503	228.60	4680.00	226.90	228.30	.12	.00	.00	9932.22	6786.88	14.00	91.84
	17.503	228.93	6423.00	226.90	228.30	.32	.00	.00	12138.92	6842.85	14.00	112.70
	17.503	229.70	11670.00	226.90	228.30	.77	.00	.00	17469.83	6976.22	14.00	162.95
	17.524	227.31	486.00	.00	.00	.00	.04	.00	1392.17	6147.58	100.00	11.97
	17.524	227.79	1331.00	.00	.00	.47	.04	.00	4449.46	6549.49	100.00	48.05
	17.524	228.07	2207.00	.00	.00	.29	.04	.00	6339.08	6641.94	100.00	70.10
	17.524	228.22	2777.00	.00	.00	.15	.04	.00	7355.73	6703.58	100.00	81.89
	17.524	228.37	3384.00	.00	.00	.15	.04	.00	8342.17	6746.26	100.00	93.38
	17.524	228.52	4087.00	.00	.00	.15	.04	.00	9376.17	6772.70	100.00	105.45
	17.524	228.64	4680.00	.00	.00	.12	.04	.00	10188.65	6793.41	100.00	114.93
	17.524	228.97	6423.00	.00	.00	.32	.04	.00	12396.31	6849.35	100.00	140.87
	17.524	229.74	11670.00	.00	.00	.77	.04	.00	17732.46	6982.72	100.00	203.35

	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
*	18.481	228.39	486.00	.00	.00	.00	1.08	.00	2072.97	3903.50	5069.00	213.28
	18.481	229.00	1331.00	.00	.00	.61	1.21	.00	4820.10	4877.63	5069.00	586.48
	18.481	229.39	2207.00	.00	.00	.39	1.32	.00	6798.90	5179.95	5069.00	833.22
	18.481	229.60	2777.00	.00	.00	.21	1.38	.00	7909.69	5345.19	5069.00	968.58
	18.481	229.80	3384.00	.00	.00	.20	1.43	.00	9247.60	8093.15	5069.00	1115.07
	18.481	230.00	4087.00	.00	.00	.20	1.48	.00	10864.63	8197.68	5069.00	1281.11
	18.481	230.14	4680.00	.00	.00	.14	1.50	.00	12033.77	8230.27	5069.00	1405.69
	18.481	230.50	6423.00	.00	.00	.35	1.53	.00	15013.63	8279.87	5069.00	1732.93
	18.481	231.35	11670.00	.00	.00	.85	1.61	.00	21995.11	8367.27	5069.00	2510.84
	18.562	228.45	486.00	.00	.00	.00	.06	.00	1919.88	3767.02	400.00	231.61
	18.562	229.07	1331.00	.00	.00	.62	.08	.00	4695.91	4858.03	400.00	630.18
	18.562	229.48	2207.00	.00	.00	.40	.08	.00	6706.70	5166.26	400.00	895.23
	18.562	229.69	2777.00	.00	.00	.21	.09	.00	7834.73	5333.97	400.00	1040.87
	18.562	229.89	3384.00	.00	.00	.20	.09	.00	9155.90	8084.86	400.00	1199.57
	18.562	230.09	4087.00	.00	.00	.20	.09	.00	10805.22	8195.87	400.00	1380.60
	18.562	230.24	4680.00	.00	.00	.14	.09	.00	11983.92	8229.18	400.00	1515.97
	18.562	230.59	6423.00	.00	.00	.36	.10	.00	14923.17	8278.73	400.00	1870.38
	18.562	231.45	11670.00	.00	.00	.86	.10	.00	22054.23	8368.01	400.00	2713.09
	18.563	228.45	486.00	229.00	230.40	.00	.00	.00	1920.69	3767.75	16.00	232.31
	18.563	229.16	1331.00	229.00	230.40	.71	.09	.00	5153.67	4929.89	16.00	631.98
	18.563	229.49	2207.00	229.00	230.40	.33	.02	.00	6810.04	5181.60	16.00	897.71
	18.563	229.70	2777.00	229.00	230.40	.21	.01	.00	7901.86	5344.01	16.00	1043.76
*	18.563	229.90	3384.00	229.00	230.40	.20	.00	.00	9225.62	8091.01	16.00	1202.94
*	18.563	230.10	4087.00	229.00	230.40	.20	.00	.00	10853.12	8197.32	16.00	1384.58
*	18.563	230.24	4680.00	229.00	230.40	.14	.00	.00	12030.38	8230.20	16.00	1520.38
	18.563	230.59	6423.00	229.00	230.40	.36	.00	.00	14969.66	8279.32	16.00	1875.87
	18.563	231.45	11670.00	229.00	230.40	.86	.00	.00	22108.49	8368.68	16.00	2721.20
	18.584	228.47	582.00	.00	.00	.00	.02	.00	1983.24	3824.09	100.00	236.80

	19.594	231.45	.00	4749.00	3346.01	407.66	995.33	.00	.00	.38	1.39	.38	222.40
	19.594	231.60	.00	5290.00	3757.06	410.27	1122.66	.00	.00	.40	1.37	.38	222.40
	19.594	231.94	.00	6707.00	4846.03	389.52	1471.46	.00	.00	.43	1.23	.41	222.40
	19.594	232.69	.00	10174.00	7426.79	389.40	2357.81	.00	.00	.49	1.06	.44	222.40
*	20.021	231.17	.00	664.00	127.03	536.97	.00	.00	.00	.15	2.36	.00	222.90
*	20.021	231.63	.00	1687.00	1120.85	566.15	.00	.00	.00	.35	2.30	.00	222.90
*	20.021	231.86	.00	2500.00	1914.75	585.19	.06	.00	.00	.43	2.27	.04	222.90
*	20.021	232.02	.00	3116.00	2521.65	590.61	3.74	.00	.00	.47	2.23	.11	222.90
*	20.021	232.23	.00	3963.00	3336.82	598.16	28.02	.00	.00	.52	2.17	.18	222.90
*	20.021	232.40	.00	4749.00	4074.58	609.12	65.29	.00	.00	.56	2.15	.24	222.90
*	20.021	232.51	.00	5290.00	4575.63	615.65	98.73	.00	.00	.58	2.13	.27	222.90
*	20.021	232.79	.00	6707.00	5868.81	631.38	206.81	.00	.00	.63	2.07	.34	222.90
*	20.021	233.42	.00	10174.00	8945.08	682.14	546.78	.00	.00	.71	2.01	.46	222.90

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	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
*	20.102	231.43	.00	664.00	345.50	318.50	.00	.00	.00	.16	1.34	.00	222.90
*	20.102	231.87	.00	1687.00	1293.87	393.09	.05	.00	.00	.29	1.53	.03	222.90
*	20.102	232.10	.00	2500.00	2059.62	433.21	7.16	.00	.00	.36	1.61	.10	222.90
	20.102	232.26	.00	3116.00	2635.58	454.43	25.99	.00	.00	.40	1.64	.15	222.90
	20.102	232.47	.00	3963.00	3417.98	478.71	66.31	.00	.00	.45	1.67	.20	222.90
	20.102	232.63	.00	4749.00	4134.70	499.63	114.67	.00	.00	.48	1.69	.25	222.90
	20.102	232.74	.00	5290.00	4623.46	514.13	152.40	.00	.00	.51	1.70	.27	222.90
	20.102	233.02	.00	6707.00	5889.27	551.68	266.05	.00	.00	.56	1.74	.33	222.90
	20.102	233.62	.00	10174.00	8938.73	626.33	608.94	.00	.00	.65	1.79	.43	222.90
	20.103	231.43	.00	664.00	350.91	313.09	.00	664.00	.00	.16	1.31	.00	222.90
	20.103	231.87	.00	1687.00	1298.74	388.19	.07	1687.00	.00	.29	1.51	.03	222.90
	20.103	232.10	.00	2500.00	2060.47	432.23	7.30	90.20	2404.89	.36	1.61	.10	222.90
	20.103	232.26	.00	3116.00	2636.38	453.35	26.27	101.03	3028.69	.40	1.64	.15	222.90
*	20.103	232.47	.00	3963.00	3418.67	477.51	66.82	114.39	3862.79	.45	1.66	.20	222.90
*	20.103	232.63	.00	4749.00	4135.30	498.34	115.36	125.40	4664.01	.48	1.68	.25	222.90
*	20.103	232.74	.00	5290.00	4623.89	512.90	153.21	132.34	5188.39	.51	1.70	.27	222.90
	20.103	233.02	.00	6707.00	5889.51	550.37	267.11	149.17	6565.79	.56	1.74	.33	222.90
	20.103	233.62	.00	10174.00	8938.48	624.91	610.61	146.30	10029.19	.65	1.78	.43	222.90
	20.124	231.46	.00	664.00	334.62	329.38	.00	.00	.00	.16	1.40	.00	223.00
	20.124	231.91	.00	1687.00	1290.64	396.36	.00	.00	.00	.29	1.55	.00	223.00
	20.124	232.14	.00	2500.00	2058.03	438.30	3.67	.00	.00	.36	1.65	.08	223.00
	20.124	232.31	.00	3116.00	2638.87	458.61	18.52	.00	.00	.40	1.67	.13	223.00
	20.124	232.51	.00	3963.00	3426.90	482.00	54.10	.00	.00	.45	1.69	.19	223.00
	20.124	232.68	.00	4749.00	4147.55	502.16	99.29	.00	.00	.49	1.71	.24	223.00
	20.124	232.79	.00	5290.00	4639.95	514.92	135.13	.00	.00	.51	1.72	.26	223.00
	20.124	233.06	.00	6707.00	5911.09	551.67	244.24	.00	.00	.56	1.76	.32	223.00
	20.124	233.67	.00	10174.00	8970.32	625.94	577.74	.00	.00	.66	1.80	.43	223.00
	20.580	232.19	.00	796.00	608.91	187.09	.00	.00	.00	.21	1.14	.00	225.00
	20.580	232.70	.00	1818.00	1601.69	216.31	.00	.00	.00	.30	1.18	.00	225.00
	20.580	233.00	.00	2624.00	2385.29	238.71	.00	.00	.00	.36	1.23	.00	225.00
	20.580	233.19	.00	3251.00	2994.85	256.15	.00	.00	.00	.40	1.26	.00	225.00
	20.580	233.41	.00	3958.00	3686.61	271.39	.00	.00	.00	.43	1.28	.00	225.00
	20.580	233.59	.00	4617.00	4331.35	285.65	.00	.00	.00	.46	1.30	.00	225.00
	20.580	233.70	.00	5046.00	4751.71	294.28	.00	.00	.00	.48	1.31	.00	225.00
	20.580	233.99	.00	6270.00	5945.66	320.53	3.81	.00	.00	.53	1.35	.10	225.00
	20.580	234.59	.00	9121.00	8748.36	297.16	75.49	.00	.00	.62	1.08	.19	225.00
	20.600	232.21	.00	796.00	618.78	177.22	.00	.00	.00	.21	1.10	.00	225.10
	20.600	232.73	.00	1818.00	1610.29	207.71	.00	.00	.00	.30	1.15	.00	225.10
	20.600	233.03	.00	2624.00	2393.64	230.36	.00	.00	.00	.36	1.20	.00	225.10
	20.600	233.22	.00	3251.00	3003.38	247.62	.00	.00	.00	.39	1.24	.00	225.10
	20.600	233.44	.00	3958.00	3695.10	262.90	.00	.00	.00	.43	1.26	.00	225.10
	20.600	233.62	.00	4617.00	4339.83	277.17	.00	.00	.00	.46	1.28	.00	225.10
	20.600	233.73	.00	5046.00	4760.16	285.84	.00	.00	.00	.48	1.29	.00	225.10
	20.600	234.02	.00	6270.00	5955.75	312.08	2.17	.00	.00	.52	1.33	.08	225.10
	20.600	234.62	.00	9121.00	8778.23	281.96	60.81	.00	.00	.62	1.05	.19	225.10

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	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
*	21.059	233.48	.00	796.00	.00	796.00	.00	.00	.00	.00	4.05	.00	225.90
*	21.059	234.19	234.19	1818.00	516.78	1301.22	.00	.00	.00	.82	5.83	.00	225.90
*	21.059	234.55	234.49	2624.00	1394.57	1229.43	.00	.00	.00	.79	5.17	.00	225.90
*	21.059	234.76	234.58	3251.00	2115.71	1135.29	.00	.00	.00	.81	4.60	.00	225.90
*	21.059	234.96	234.69	3958.00	2854.15	1103.85	.00	.00	.00	.85	4.34	.00	225.90
*	21.059	235.12	234.76	4617.00	3539.03	1077.97	.00	.00	.00	.88	4.12	.00	225.90
*	21.059	235.22	.00	5046.00	3978.67	1067.33	.00	.00	.00	.90	4.01	.01	225.90
*	21.059	235.49	.00	6270.00	5222.61	1045.25	2.14	.00	.00	.95	3.76	.21	225.90
*	21.059	236.04	.00	9121.00	8046.56	1032.59	41.86	.00	.00	1.03	3.41	.31	225.90
*	21.501	237.01	.00	796.00	.00	796.00	.00	.00	.00	.00	2.54	.00	226.70
*	21.501	237.94	.00	1818.00	983.14	828.76	6.11	.00	.00	.37	2.30	.14	226.70
*	21.501	238.21	.00	2624.00	1660.96	935.15	27.88	.00	.00	.47	2.51	.21	226.70
*	21.501	238.35	.00	3251.00	2173.94	1020.93	56.13	.00	.00	.55	2.68	.27	226.70
*	21.501	238.51	.00	3958.00	2766.47	1088.44	103.09	.00	.00	.62	2.80	.31	226.70
*	21.501	238.64	.00	4617.00	3308.81	1150.36	157.83	.00	.00	.67	2.90	.36	226.70
*	21.501	238.72	.00	5046.00	3659.88	1185.32	200.80	.00	.00	.71	2.96	.38	226.70
	21.501	238.92	.00	6270.00	4646.35	1278.78	344.88	.00	.00	.80	3.11	.45	226.70
	21.501	239.32	.00	9121.00	6865.10	1457.39	798.50	.00	.00	.97	3.36	.58	226.70
	21.582	237.34	.00	796.00	.00	796.00	.00	.00	.00	.00	2.46	.00	226.80
	21.582	238.18	.00	1818.00	1076.20	730.41	11.39	.00	.00	.35	1.99	.14	226.80
	21.582	238.48	.00	2624.00	1768.93	806.35	48.72	.00	.00	.44	2.11	.22	226.80
	21.582	238.65	.00	3251.00	2284.53	877.03	89.44	.00	.00	.50	2.24	.26	226.80
	21.582	238.82	.00	3958.00	2868.32	933.99	155.70	.00	.00	.56	2.33	.30	226.80
	21.582	238.97	.00	4617.00	3405.09	977.59	234.32	.00	.00	.60	2.39	.34	226.80
	21.582	239.06	.00	5046.00	3748.18	1008.00	289.82	.00	.00	.63	2.44	.36	226.80
	21.582	239.28	.00	6270.00	4708.55	1084.59	476.86	.00	.00	.71	2.54	.41	226.80

	21.582	239.72	.00	9121.00	6858.14	1250.19	1012.67	.00	.00	.85	2.77	.54	226.80
	21.583	237.34	.00	796.00	.00	796.00	.00	796.00	.00	.00	2.45	.00	226.80
	21.583	238.18	.00	1818.00	1078.25	728.21	11.54	180.67	1635.88	.35	1.99	.14	226.80
	21.583	238.48	.00	2624.00	1770.95	803.82	49.23	202.75	2424.02	.44	2.10	.21	226.80
	21.583	238.65	.00	3251.00	2290.40	868.75	91.85	221.00	3035.97	.50	2.22	.26	226.80
	21.583	238.82	.00	3958.00	2872.29	927.05	158.65	239.95	3723.58	.55	2.31	.30	226.80
	21.583	238.97	.00	4617.00	3407.95	971.54	237.52	255.80	4358.09	.60	2.37	.34	226.80
	21.583	239.06	.00	5046.00	3750.51	1002.24	293.25	265.85	4781.25	.63	2.42	.36	226.80
*	21.583	239.28	.00	6270.00	4709.52	1079.06	481.41	233.05	6043.81	.70	2.53	.41	226.80
*	21.583	239.72	.00	9121.00	6857.37	1244.66	1018.97	264.42	8856.91	.84	2.76	.54	226.80
	21.604	237.40	.00	945.00	.00	945.00	.00	.00	.00	.00	2.93	.00	226.90
	21.604	238.22	.00	1980.00	1087.19	883.37	9.44	.00	.00	.37	2.43	.15	226.90
	21.604	238.53	.00	2784.00	1790.31	950.16	43.53	.00	.00	.46	2.50	.22	226.90
	21.604	238.70	.00	3344.00	2268.95	992.29	82.76	.00	.00	.51	2.55	.26	226.90
	21.604	238.88	.00	3957.00	2786.42	1027.81	142.77	.00	.00	.55	2.58	.29	226.90
	21.604	239.03	.00	4532.00	3261.11	1056.76	214.12	.00	.00	.59	2.60	.33	226.90
	21.604	239.12	.00	4907.00	3563.53	1079.08	264.39	.00	.00	.61	2.62	.35	226.90
	21.604	239.35	.00	6113.00	4507.95	1162.28	442.78	.00	.00	.69	2.74	.40	226.90
	21.604	239.79	.00	8384.00	6219.40	1259.51	905.09	.00	.00	.77	2.80	.49	226.90

	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	22.009	239.40	.00	945.00	2.77	942.23	.00	.00	.00	.13	3.01	.00	229.10
*	22.009	240.03	.00	1980.00	654.52	1325.26	.22	.00	.00	.41	3.86	.10	229.10
*	22.009	240.34	.00	2784.00	1425.43	1350.21	8.36	.00	.00	.54	3.76	.21	229.10
*	22.009	240.52	.00	3344.00	1951.48	1368.43	24.09	.00	.00	.61	3.71	.26	229.10
*	22.009	240.69	.00	3957.00	2507.31	1394.96	54.73	.00	.00	.67	3.70	.32	229.10
*	22.009	240.84	.00	4532.00	3020.25	1415.95	95.80	.00	.00	.71	3.68	.36	229.10
	22.009	240.93	.00	4907.00	3350.63	1427.49	128.88	.00	.00	.74	3.66	.38	229.10
	22.009	241.19	.00	6113.00	4380.61	1459.02	273.37	.00	.00	.81	3.60	.44	229.10
	22.009	241.60	.00	8384.00	6193.38	1549.00	641.62	.00	.00	.92	3.62	.54	229.10
	22.450	242.15	.00	945.00	.28	944.71	.00	.00	.00	.11	3.37	.00	231.40
	22.450	244.08	.00	1980.00	352.83	1627.17	.00	.00	.00	.77	4.24	.00	231.40
	22.450	244.45	.00	2784.00	888.07	1895.93	.00	.00	.00	.69	4.67	.00	231.40
	22.450	244.62	.00	3344.00	1325.47	2018.53	.00	.00	.00	.77	4.84	.00	231.40
	22.450	244.78	.00	3957.00	1836.51	2120.49	.00	.00	.00	.85	4.96	.00	231.40
*	22.450	244.92	.00	4532.00	2319.78	2212.22	.00	.00	.00	.93	5.07	.00	231.40
*	22.450	245.00	.00	4907.00	2637.97	2269.03	.00	.00	.00	.97	5.14	.00	231.40
*	22.450	245.23	.00	6113.00	3672.51	2440.49	.00	.00	.00	1.10	5.35	.00	231.40
*	22.450	245.61	245.04	8384.00	5724.02	2659.98	.00	.00	.00	1.30	5.51	.00	231.40
	22.602	243.18	.00	945.00	.00	945.00	.00	.00	.00	.00	2.90	.00	232.10
	22.602	245.47	.00	1980.00	310.62	1669.38	.00	.00	.00	.55	3.58	.00	232.10
	22.602	246.05	.00	2784.00	811.90	1968.60	3.50	.00	.00	.75	3.88	.17	232.10
	22.602	246.31	.00	3344.00	1170.38	2148.75	24.86	.00	.00	.86	4.08	.31	232.10
	22.602	246.55	.00	3957.00	1570.72	2319.28	67.00	.00	.00	.94	4.26	.44	232.10
	22.602	246.74	.00	4532.00	1946.95	2468.04	117.01	.00	.00	1.01	4.42	.53	232.10
	22.602	246.85	.00	4907.00	2194.32	2558.08	154.60	.00	.00	1.05	4.51	.57	232.10
	22.602	247.17	.00	6113.00	2992.66	2811.60	308.74	.00	.00	1.15	4.76	.67	232.10
	22.602	247.63	.00	8384.00	4480.64	3203.57	699.79	.00	.00	1.29	5.12	.83	232.10
	22.603	243.21	.00	945.00	.00	945.00	.00	945.00	.00	.00	2.88	.00	232.10
	22.603	245.47	.00	1980.00	310.50	1669.50	.00	1254.46	739.73	.55	3.58	.00	232.10
	22.603	246.05	.00	2784.00	812.10	1968.39	3.51	723.42	2088.19	.75	3.88	.17	232.10
	22.603	246.31	.00	3344.00	1173.37	2145.28	25.36	599.52	2746.43	.85	4.07	.31	232.10
	22.603	246.55	.00	3957.00	1572.48	2317.09	67.42	548.33	3399.69	.94	4.26	.44	232.10
	22.603	246.74	.00	4532.00	1945.96	2469.33	116.71	529.21	4007.91	1.01	4.42	.53	232.10
	22.603	246.85	.00	4907.00	2190.65	2563.03	153.32	522.82	4391.76	1.05	4.52	.57	232.10
	22.603	247.17	.00	6113.00	2992.73	2811.48	308.79	507.72	5614.27	1.15	4.76	.67	232.10
*	22.603	247.63	.00	8384.00	4483.02	3199.14	701.85	519.31	7921.22	1.29	5.11	.83	232.10
	22.644	243.44	.00	1072.00	.00	1072.00	.00	.00	.00	.00	3.15	.00	232.10
	22.644	245.83	.00	2113.00	504.85	1608.15	.00	.00	.00	.59	3.27	.01	232.10
	22.644	246.48	.00	2931.00	1123.17	1767.49	40.34	.00	.00	.72	3.28	.31	232.10
	22.644	246.78	.00	3476.00	1512.85	1867.39	95.76	.00	.00	.77	3.33	.41	232.10
	22.644	247.04	.00	4097.00	1938.60	1985.57	172.83	.00	.00	.81	3.42	.46	232.10
	22.644	247.25	.00	4709.00	2348.65	2095.70	264.65	.00	.00	.85	3.51	.50	232.10
	22.644	247.38	.00	5103.00	2610.88	2159.60	332.53	.00	.00	.88	3.56	.53	232.10
	22.644	247.72	.00	6378.00	3455.58	2348.58	573.83	.00	.00	.95	3.71	.62	232.10
	22.644	248.21	.00	8338.00	4783.87	2551.10	1003.04	.00	.00	1.01	3.82	.74	232.10

	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	100.190	244.73	.00	1072.00	.00	1072.00	.00	.00	.00	.00	2.97	.00	231.90
	100.190	247.13	.00	2113.00	.00	2101.68	11.32	.00	.00	.00	3.96	.38	231.90
*	100.190	247.80	.00	2931.00	21.51	2694.63	214.86	.00	.00	.33	4.63	.50	231.90
*	100.190	248.09	.00	3476.00	88.65	2911.89	475.46	.00	.00	.46	4.81	.61	231.90
*	100.190	248.36	.00	4097.00	204.73	3058.62	833.65	.00	.00	.58	4.89	.69	231.90
*	100.190	248.57	.00	4709.00	337.52	3146.68	1224.80	.00	.00	.67	4.90	.77	231.90
*	100.190	248.69	.00	5103.00	431.15	3182.61	1489.24	.00	.00	.72	4.88	.82	231.90
	100.190	249.04	.00	6378.00	747.15	3312.54	2318.31	.00	.00	.82	4.89	.94	231.90
	100.190	249.48	.00	8338.00	1329.24	3469.92	3538.84	.00	.00	.89	4.88	1.08	231.90
	100.640	248.41	.00	1072.00	.00	1072.00	.00	.00	.00	.00	2.48	.00	239.40
	100.640	250.87	.00	2113.00	.00	2113.00	.00	.00	.00	.00	2.75	.00	239.40
	100.640	251.96	.00	2931.00	.00	2931.00	.00	.00	.00	.00	3.15	.00	239.40
	100.640	252.45	.00	3476.00	.00	3476.00	.00	.00	.00	.00	3.45	.00	239.40
	100.640	252.89	.00	4097.00	.00	4097.00	.00	.00	.00	.00	3.82	.00	239.40
	100.640	253.24	.00	4709.00	.00	4709.00	.00	.00	.00	.00	4.18	.00	239.40
	100.640	253.44	.00	5103.00	.00	5103.00	.00	.00	.00	.00	4.40	.00	239.40
	100.640	254.05	.00	6378.00	.00	6378.00	.00	.00	.00	.00	5.09	.00	239.40
	100.640	254.78	.00	8338.00	.00	8338.00	.00	.00	.00	.00	6.10	.00	239.40
	100.640	248.42	.00	1072.00	.00	1072.00	.00	1072.00	.00	.00	2.47	.00	239.40

	100.640	250.88	.00	2113.00	.00	2113.00	.00	2113.00	.00	.00	2.75	.00	239.40
	100.640	251.97	.00	2931.00	.00	2931.00	.00	2931.00	.00	.00	3.15	.00	239.40
	100.640	252.46	.00	3476.00	.00	3476.00	.00	3476.00	.00	.00	3.45	.00	239.40
	100.640	252.90	.00	4097.00	.00	4097.00	.00	4097.00	.00	.00	3.81	.00	239.40
	100.640	253.62	.00	4709.00	.00	4709.00	.00	4709.00	.00	.00	3.97	.00	239.40
	100.640	253.91	.00	5103.00	.00	5103.00	.00	5103.00	.00	.00	4.14	.00	239.40
	100.640	254.87	.00	6378.00	.00	6378.00	.00	6378.00	.00	.00	4.62	.00	239.40
*	100.640	255.81	.00	8338.00	.00	3840.53	4497.47	6196.93	2160.12	.00	2.51	.71	239.40
	100.750	249.33	.00	1072.00	.00	1072.00	.00	.00	.00	.00	2.40	.00	240.20
	100.750	251.61	.00	2113.00	.00	2113.00	.00	.00	.00	.00	2.79	.00	240.20
	100.750	252.71	.00	2931.00	.00	2913.09	17.91	.00	.00	.00	3.15	.22	240.20
	100.750	253.26	.00	3476.00	12.28	3280.16	183.55	.00	.00	.21	3.26	.41	240.20
	100.750	253.77	.00	4097.00	110.23	3491.43	495.34	.00	.00	.38	3.22	.53	240.20
*	100.750	254.40	.00	4709.00	495.98	3258.81	954.20	.00	.00	.39	2.76	.54	240.20
*	100.750	254.68	.00	5103.00	759.51	3148.56	1194.93	.00	.00	.42	2.57	.53	240.20
*	100.750	255.59	.00	6378.00	1630.05	2776.18	1971.77	.00	.00	.45	2.03	.49	240.20
	100.750	256.03	.00	8338.00	2404.78	3125.56	2807.66	.00	.00	.53	2.17	.56	240.20
*	101.080	252.94	.00	1072.00	.00	1072.00	.00	.00	.00	.00	4.03	.00	242.30
*	101.080	255.11	.00	2113.00	.00	2113.00	.00	.00	.00	.00	5.20	.00	242.30
*	101.080	256.31	.00	2931.00	.00	2931.00	.00	.00	.00	.00	5.94	.00	242.30
*	101.080	256.40	.23	3476.00	.00	3476.00	.00	.00	.00	.00	6.94	.00	242.30
*	101.080	256.51	.00	4097.00	.00	2553.84	1543.16	.00	.00	.00	5.02	1.06	242.30
*	101.080	256.55	.00	4709.00	.00	2889.22	1819.78	.00	.00	.00	5.65	1.21	242.30
*	101.080	256.57	.00	5103.00	.00	3082.22	2020.78	.00	.00	.00	5.99	1.30	242.30
*	101.080	256.72	.00	6378.00	.00	3637.37	2740.63	.00	.00	.00	6.93	1.58	242.30
*	101.080	257.22	.00	8338.00	.00	3907.77	4430.23	.00	.00	.00	6.93	1.82	242.30

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	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	101.090	252.96	.00	1072.00	.00	1072.00	.00	1072.00	.00	.00	4.02	.00	242.30
	101.090	255.14	.00	2113.00	.00	2113.00	.00	2113.00	.00	.00	5.18	.00	242.30
*	101.090	256.35	.00	2931.00	.00	2931.00	.00	3784.45	34.91	.00	5.89	.00	242.30
	101.090	256.40	.00	3476.00	.00	3476.00	.00	3477.98	29.92	.00	6.93	.00	242.30
	101.090	257.00	.00	4097.00	.00	2089.72	2007.28	3971.15	160.47	.00	3.82	.95	242.30
*	101.090	257.16	.00	4709.00	.00	2256.19	2452.81	4362.16	329.01	.00	4.04	1.05	242.30
*	101.090	257.26	.00	5103.00	.00	2350.26	2752.74	4601.17	475.28	.00	4.14	1.10	242.30
*	101.090	257.60	.00	6378.00	.00	2605.98	3772.02	5193.21	1165.39	.00	4.39	1.25	242.30
*	101.090	258.13	.00	8338.00	.00	2872.58	5465.42	5309.86	3017.44	.00	4.52	1.40	242.30
	101.220	255.17	.00	1072.00	.00	1072.00	.00	.00	.00	.00	3.68	.00	244.10
	101.220	257.52	.00	2113.00	.00	1819.58	293.42	.00	.00	.00	4.04	.58	244.10
*	101.220	258.48	.00	2931.00	.00	1700.91	1230.09	.00	.00	.00	3.26	.73	244.10
*	101.220	258.85	.00	3476.00	1.06	1733.06	1741.88	.00	.00	.14	3.15	.79	244.10
	101.220	258.44	.00	4097.00	.00	2418.49	1678.51	.00	.00	.00	4.66	1.04	244.10
	101.220	258.67	.00	4709.00	.05	2525.86	2183.08	.00	.00	.09	4.71	1.13	244.10
	101.220	258.81	.00	5103.00	.94	2591.19	2510.87	.00	.00	.18	4.74	1.18	244.10
	101.220	259.20	.00	6378.00	15.88	2786.10	3576.03	.00	.00	.37	4.82	1.32	244.10
	101.220	259.71	.00	8338.00	98.48	3040.97	5198.55	.00	.00	.47	4.92	1.48	244.10
	101.780	262.53	.00	1072.00	.00	892.90	179.10	.00	.00	.00	3.55	.67	253.00
	101.780	263.56	.00	2113.00	.00	1068.35	1044.65	.00	.00	.00	3.55	.85	253.00
*	101.780	263.62	.00	2931.00	.00	1426.99	1504.01	.00	.00	.00	4.70	1.14	253.00
*	101.780	263.74	.00	3476.00	.00	1568.31	1907.69	.00	.00	.00	5.06	1.25	253.00
	101.780	264.36	.00	4097.00	.00	1242.03	2854.97	.00	.00	.00	3.63	1.05	253.00
	101.780	264.53	.00	4709.00	.00	1300.01	3408.99	.00	.00	.00	3.70	1.11	253.00
	101.780	264.63	.00	5103.00	.00	1334.86	3768.14	.00	.00	.00	3.75	1.14	253.00
	101.780	264.92	.00	6378.00	.00	1433.07	4944.93	.00	.00	.00	3.85	1.24	253.00
	101.780	265.29	.00	8338.00	107.10	1555.81	6675.10	.00	.00	.42	3.96	1.35	253.00
	101.790	262.53	.00	1072.00	.00	891.80	180.20	793.50	280.35	.00	3.54	.67	253.00
	101.790	263.56	.00	2113.00	.00	1070.30	1042.70	622.24	1486.29	.00	3.56	.85	253.00
	101.790	263.62	.00	2931.00	.00	1420.52	1510.47	895.73	2052.00	.00	4.67	1.13	253.00
*	101.790	263.74	.00	3476.00	.00	1556.58	1919.42	990.95	2514.92	.00	5.02	1.25	253.00
*	101.790	264.36	.00	4097.00	.00	1245.74	2851.26	547.25	3552.78	.00	3.64	1.05	253.00
*	101.790	264.53	.00	4709.00	.00	1304.56	3404.44	554.51	4156.66	.00	3.72	1.11	253.00
*	101.790	264.63	.00	5103.00	.00	1335.30	3767.70	556.58	4555.55	.00	3.75	1.14	253.00
*	101.790	264.92	.00	6378.00	.00	1437.15	4940.85	564.92	5814.53	.00	3.86	1.24	253.00
	101.790	265.29	.00	8338.00	107.11	1555.78	6675.11	543.65	7790.14	.42	3.96	1.35	253.00
	101.900	263.94	.00	852.00	.00	752.71	99.29	.00	.00	.00	3.09	.51	254.60
	101.900	264.91	.00	1687.00	.00	994.72	692.28	.00	.00	.00	3.44	.78	254.60
	101.900	265.41	.00	2419.00	.00	1035.97	1383.03	.00	.00	.00	3.30	.83	254.60
	101.900	265.63	.00	2874.00	.00	1070.60	1803.40	.00	.00	.00	3.30	.88	254.60
	101.900	265.70	.00	3366.00	.00	1196.38	2169.62	.00	.00	.00	3.64	.99	254.60
	101.900	265.88	.00	3849.00	.03	1230.16	2618.81	.00	.00	.07	3.64	1.03	254.60
	101.900	265.98	.00	4160.00	.29	1252.74	2906.97	.00	.00	.15	3.65	1.06	254.60
	101.900	266.26	.00	5104.00	3.78	1305.35	3794.87	.00	.00	.28	3.64	1.12	254.60
	101.900	266.60	.00	6170.00	20.11	1333.60	4816.28	.00	.00	.28	3.54	1.15	254.60

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	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	102.320	268.06	.00	852.00	.00	852.00	.00	.00	.00	.00	3.15	.00	257.60
	102.320	270.47	.00	1687.00	139.75	1547.25	.00	.00	.00	.53	3.71	.00	257.60
	102.320	270.92	.00	2419.00	564.55	1853.67	.78	.00	.00	.85	4.04	.15	257.60
*	102.320	271.12	.00	2874.00	848.09	2010.83	15.08	.00	.00	.99	4.20	.31	257.60
	102.320	271.42	.00	3366.00	1247.53	2033.92	84.55	.00	.00	1.08	3.99	.53	257.60
	102.320	271.58	.00	3849.00	1545.02	2157.41	146.57	.00	.00	1.16	4.11	.65	257.60
	102.320	271.67	.00	4160.00	1737.92	2231.38	190.70	.00	.00	1.21	4.17	.72	257.60
	102.320	271.91	.00	5104.00	2316.73	2457.16	330.11	.00	.00	1.35	4.39	.90	257.60
	102.320	272.13	.00	6170.00	2958.18	2723.27	488.55	.00	.00	1.51	4.69	1.07	257.60
	102.600	271.18	.00	852.00	.00	852.00	.00	.00	.00	.00	3.50	.00	261.30
	102.600	274.46	.00	1687.00	302.57	1384.43	.00	.00	.00	.59	3.12	.00	261.30
	102.600	275.00	.00	2419.00	826.22	1554.95	37.83	.00	.00	.80	3.13	.34	261.30
	102.600	275.22	.00	2874.00	1121.24	1657.71	95.04	.00	.00	.89	3.19	.47	261.30

	102.600	275.37	.00	3366.00	1400.11	1814.58	151.32	.00	.00	.99	3.40	.58	261.30
	102.600	275.55	.00	3849.00	1706.48	1915.51	227.01	.00	.00	1.05	3.47	.68	261.30
	102.600	275.65	.00	4160.00	1904.52	1977.44	278.04	.00	.00	1.09	3.52	.73	261.30
	102.600	275.96	.00	5104.00	2515.02	2144.84	444.14	.00	.00	1.19	3.62	.87	261.30
	102.600	276.27	.00	6170.00	3216.50	2307.80	645.70	.00	.00	1.28	3.70	1.00	261.30
	102.900	275.19	.00	852.00	.00	852.00	.00	.00	.00	.00	3.81	.00	265.30
	102.900	277.18	.00	1687.00	15.82	963.95	707.22	.00	.00	.45	3.19	.59	265.30
	102.900	277.55	.00	2419.00	37.10	1063.28	1318.62	.00	.00	.60	3.34	.73	265.30
	102.900	277.74	.00	2874.00	52.00	1112.26	1709.73	.00	.00	.67	3.41	.80	265.30
	102.900	277.95	.00	3366.00	69.89	1148.11	2148.00	.00	.00	.72	3.42	.86	265.30
	102.900	278.12	.00	3849.00	87.35	1195.61	2566.04	.00	.00	.77	3.49	.91	265.30
	102.900	278.22	.00	4160.00	98.88	1223.56	2837.56	.00	.00	.79	3.52	.95	265.30
	102.900	278.51	.00	5104.00	135.51	1305.13	3663.35	.00	.00	.86	3.63	1.04	265.30
	102.900	278.79	.00	6170.00	182.06	1390.38	4597.56	.00	.00	.89	3.74	1.13	265.30
*	102.930	275.55	.00	852.00	.00	852.00	.00	.00	.00	.00	1.88	.00	263.30
	102.930	277.35	.00	1687.00	20.57	1657.40	9.03	.00	.00	.36	2.62	.25	263.30
	102.930	277.73	.00	2419.00	62.10	2312.10	44.80	.00	.00	.56	3.41	.44	263.30
	102.930	277.91	.00	2874.00	97.19	2696.41	80.40	.00	.00	.68	3.85	.55	263.30
	102.930	278.11	.00	3366.00	145.54	3086.44	134.02	.00	.00	.80	4.27	.67	263.30
*	102.930	278.27	.00	3849.00	198.52	3454.44	196.03	.00	.00	.91	4.65	.77	263.30
*	102.930	278.37	.00	4160.00	235.56	3683.59	240.85	.00	.00	.97	4.89	.84	263.30
*	102.930	278.63	.00	5104.00	362.27	4340.84	400.89	.00	.00	1.17	5.53	1.02	263.30
*	102.930	278.89	.00	6170.00	527.88	5021.45	620.67	.00	.00	1.36	6.15	1.21	263.30
	102.950	275.60	.00	852.00	.00	852.00	.00	.00	.00	.00	1.87	.00	263.30
	102.950	277.48	.00	1687.00	.00	1687.00	.00	.00	.00	.00	2.61	.00	263.30
	102.950	277.93	.00	2419.00	.00	2346.60	72.40	.00	.00	.00	3.35	.48	263.30
	102.950	278.16	.00	2874.00	.00	2742.62	131.38	.00	.00	.00	3.76	.60	263.30
	102.950	278.40	.00	3366.00	.00	3151.85	214.15	.00	.00	.00	4.16	.72	263.30
	102.950	278.61	.00	3849.00	.00	3529.73	319.27	.00	.00	.00	4.51	.83	263.30
	102.950	278.74	.00	4160.00	.00	3765.47	394.53	.00	.00	.00	4.72	.90	263.30
	102.950	279.18	.00	5104.00	519.92	3939.22	644.86	.00	.00	1.07	4.62	.97	263.30
	102.950	279.57	.00	6170.00	757.13	4421.35	991.52	.00	.00	1.20	4.92	1.10	263.30

	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	102.960	275.62	.00	852.00	.00	852.00	.00	852.00	.00	.00	1.86	.00	263.30
	102.960	277.68	.00	1687.00	.00	1687.00	.00	1687.00	.00	.00	2.51	.00	263.30
	102.960	278.41	.00	2419.00	.00	2262.61	156.39	2419.00	.00	.00	2.98	.52	263.30
	102.960	278.88	.00	2874.00	.00	2561.39	312.61	2874.00	.00	.00	3.14	.62	263.30
	102.960	279.15	.00	3366.00	.00	2903.86	462.14	2966.72	428.30	.00	3.42	.71	263.30
	102.960	279.43	.00	3849.00	.00	3207.50	641.50	3089.09	760.18	.00	3.64	.79	263.30
	102.960	279.58	.00	4160.00	.00	3394.37	765.63	3153.06	1007.65	.00	3.77	.84	263.30
*	102.960	280.09	.00	5104.00	763.70	3283.68	1056.62	3153.01	1961.81	.90	3.42	.83	263.30
*	102.960	280.41	.00	6170.00	1036.13	3659.19	1474.68	3063.48	3108.58	1.03	3.66	.97	263.30
*	102.970	275.69	.00	852.00	.00	852.00	.00	.00	.00	.00	.77	.00	264.50
*	102.970	277.80	.00	1687.00	7.78	1679.19	.03	.00	.00	.18	1.21	.02	264.50
*	102.970	278.56	.00	2419.00	27.31	2381.27	10.42	.00	.00	.25	1.59	.13	264.50
*	102.970	279.04	.00	2874.00	58.90	2778.51	36.59	.00	.00	.27	1.77	.19	264.50
*	102.970	279.34	.00	3366.00	96.81	3200.40	68.78	.00	.00	.30	1.99	.24	264.50
*	102.970	279.63	.00	3849.00	148.52	3586.72	113.75	.00	.00	.34	2.18	.28	264.50
*	102.970	279.80	.00	4160.00	187.58	3824.49	147.93	.00	.00	.36	2.29	.31	264.50
*	102.970	280.21	.00	5104.00	333.30	4491.92	278.78	.00	.00	.45	2.60	.41	264.50
*	102.970	280.53	.00	6170.00	514.26	5211.67	444.07	.00	.00	.55	2.93	.52	264.50
	102.980	275.70	.00	852.00	.00	852.00	.00	.00	.00	.00	.77	.00	264.50
	102.980	277.81	.00	1687.00	.00	1687.00	.00	.00	.00	.00	1.21	.00	264.50
	102.980	278.57	.00	2419.00	.00	2408.19	10.81	.00	.00	.00	1.60	.13	264.50
	102.980	279.05	.00	2874.00	.00	2835.99	38.01	.00	.00	.00	1.81	.19	264.50
	102.980	279.35	.00	3366.00	.00	3294.05	71.95	.00	.00	.00	2.05	.24	264.50
	102.980	279.64	.00	3849.00	150.79	3582.36	115.85	.00	.00	.34	2.17	.28	264.50
	102.980	279.81	.00	4160.00	190.47	3818.93	150.60	.00	.00	.36	2.28	.31	264.50
	102.980	280.23	.00	5104.00	339.33	4480.10	284.57	.00	.00	.45	2.58	.41	264.50
	102.980	280.56	.00	6170.00	527.13	5186.37	456.50	.00	.00	.55	2.91	.52	264.50
	102.990	275.88	.00	852.00	.00	852.00	.00	852.00	.00	.00	.75	.00	264.50
	102.990	278.55	.00	1687.00	.00	1679.79	7.21	1681.71	.42	.00	1.12	.09	264.50
	102.990	279.57	.00	2419.00	.00	2350.05	68.95	1950.63	461.86	.00	1.43	.18	264.50
	102.990	279.96	.00	2874.00	.00	2747.05	126.95	1874.09	1005.67	.00	1.62	.23	264.50
	102.990	280.24	.00	3366.00	.00	3162.58	203.42	1869.54	1496.68	.00	1.82	.29	264.50
	102.990	280.51	.00	3849.00	316.57	3259.50	272.93	1844.20	2007.42	.35	1.84	.32	264.50
	102.990	280.67	.00	4160.00	377.49	3453.34	329.17	1830.94	2335.67	.38	1.92	.35	264.50
	102.990	281.07	.00	5104.00	576.36	4012.92	514.72	1826.22	3323.35	.46	2.17	.44	264.50
	102.990	281.42	.00	6170.00	808.99	4626.51	734.50	1857.16	4317.16	.55	2.44	.53	264.50
*	103.000	275.89	.00	852.00	.13	851.87	.00	.00	.00	.08	1.27	.00	265.40
*	103.000	278.55	.00	1687.00	42.08	1644.50	.42	.00	.00	.34	1.75	.16	265.40
*	103.000	279.57	.00	2419.00	147.23	2268.42	3.34	.00	.00	.43	2.17	.31	265.40
*	103.000	279.96	.00	2874.00	230.83	2637.25	5.93	.00	.00	.49	2.43	.38	265.40
*	103.000	280.25	.00	3366.00	329.97	3025.93	10.10	.00	.00	.58	2.72	.30	265.40
*	103.000	280.51	.00	3849.00	444.03	3382.91	22.06	.00	.00	.67	2.97	.26	265.40
*	103.000	280.66	.00	4160.00	521.35	3603.46	35.20	.00	.00	.72	3.12	.27	265.40
*	103.000	281.06	.00	5104.00	771.14	4228.65	104.21	.00	.00	.87	3.54	.35	265.40
*	103.000	281.41	.00	6170.00	1057.21	4877.96	234.83	.00	.00	1.01	3.96	.47	265.40

	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	103.010	275.91	.00	852.00	.00	852.00	.00	.00	.00	.00	1.26	.00	265.40
	103.010	278.58	.00	1687.00	.00	1687.00	.00	.00	.00	.00	1.79	.00	265.40
	103.010	279.60	.00	2419.00	.00	2419.00	.00	.00	.00	.00	2.31	.00	265.40
	103.010	280.01	.00	2874.00	235.10	2632.82	6.08	.00	.00	.49	2.42	.38	265.40
	103.010	280.30	.00	3366.00	339.97	3014.88	11.14	.00	.00	.58	2.70	.28	265.40
	103.010	280.57	.00	3849.00	460.26	3362.68	26.07	.00	.00	.67	2.93	.25	265.40
	103.010	280.73	.00	4160.00	540.35	3577.89	41.76	.00	.00	.72	3.08	.27	265.40

	103.010	281.15	.00	5104.00	798.61	4183.18	122.21	.00	.00	.86	3.47	.35	265.40
	103.010	281.52	.00	6170.00	1094.08	4799.62	276.31	.00	.00	1.00	3.86	.48	265.40
	103.020	276.18	.00	852.00	.00	852.00	.00	852.00	.00	.00	1.21	.00	265.40
	103.020	279.70	.00	1687.00	.00	1687.00	.00	1687.00	.00	.00	1.60	.00	265.40
*	103.020	281.91	.00	2419.00	.00	2207.92	211.08	2393.68	5.68	.00	1.72	.26	265.40
*	103.020	282.25	.00	2874.00	610.79	1996.39	266.82	2351.10	534.42	.42	1.52	.25	265.40
*	103.020	282.43	.00	3366.00	740.96	2271.62	353.42	2294.35	1073.50	.48	1.70	.30	265.40
*	103.020	282.58	.00	3849.00	870.45	2535.78	442.77	2233.09	1621.47	.54	1.88	.34	265.40
*	103.020	282.67	.00	4160.00	954.59	2703.16	502.25	2196.58	1973.46	.57	1.99	.37	265.40
*	103.020	282.90	.00	5104.00	1214.42	3196.62	692.97	2097.04	3047.38	.68	2.31	.45	265.40
*	103.020	283.10	.00	6170.00	1510.69	3742.55	916.75	2008.49	4164.42	.79	2.67	.55	265.40
*	103.030	276.16	.00	852.00	.00	852.00	.00	.00	.00	.00	2.99	.00	264.10
*	103.030	279.73	.00	1687.00	311.64	1117.26	258.11	.00	.00	.50	2.33	.46	264.10
	103.030	281.96	.00	2419.00	815.98	795.97	807.05	.00	.00	.44	1.31	.41	264.10
	103.030	282.28	.00	2874.00	996.70	877.73	999.57	.00	.00	.48	1.40	.45	264.10
	103.030	282.47	.00	3366.00	1184.04	985.11	1196.85	.00	.00	.54	1.55	.51	264.10
	103.030	282.63	.00	3849.00	1368.46	1088.43	1392.11	.00	.00	.60	1.69	.56	264.10
	103.030	282.72	.00	4160.00	1487.97	1152.61	1519.43	.00	.00	.63	1.77	.59	264.10
	103.030	282.97	.00	5104.00	1851.38	1344.16	1908.47	.00	.00	.74	2.02	.69	264.10
	103.030	283.19	.00	6170.00	2264.07	1551.87	2354.06	.00	.00	.85	2.29	.79	264.10
*	103.040	276.50	.00	640.00	.00	640.00	.00	.00	.00	.00	3.43	.00	267.70
*	103.040	279.87	.00	1165.00	12.45	905.58	246.97	.00	.00	.47	2.96	.47	267.70
*	103.040	282.01	.00	1531.00	87.06	591.50	852.44	.00	.00	.30	1.55	.45	267.70
*	103.040	282.33	.00	1742.00	119.12	616.15	1006.72	.00	.00	.33	1.56	.48	267.70
*	103.040	282.53	.00	1985.00	149.26	665.33	1170.41	.00	.00	.36	1.66	.51	267.70
*	103.040	282.69	.00	2198.00	177.18	704.69	1316.13	.00	.00	.40	1.73	.54	267.70
*	103.040	282.79	.00	2378.00	198.81	743.28	1435.91	.00	.00	.42	1.81	.57	267.70
*	103.040	283.06	.00	2857.00	260.48	834.51	1762.01	.00	.00	.49	1.99	.64	267.70
*	103.040	283.30	.00	2776.00	270.29	763.34	1742.37	.00	.00	.46	1.78	.58	267.70
*	103.190	278.73	.00	640.00	.00	640.00	.00	.00	.00	.00	4.36	.00	271.30
	103.190	280.62	.00	1165.00	461.06	544.67	159.27	.00	.00	.65	2.49	.49	271.30
	103.190	282.15	.00	1531.00	750.38	381.21	399.41	.00	.00	.50	1.36	.36	271.30
	103.190	282.46	.00	1742.00	866.13	398.62	477.25	.00	.00	.52	1.36	.37	271.30
	103.190	282.67	.00	1985.00	994.54	431.79	558.67	.00	.00	.56	1.44	.39	271.30
	103.190	282.85	.00	2198.00	1107.11	460.40	630.49	.00	.00	.59	1.50	.41	271.30
	103.190	282.96	.00	2378.00	1201.52	486.53	689.95	.00	.00	.62	1.56	.43	271.30
	103.190	283.25	.00	2857.00	1454.14	550.97	851.88	.00	.00	.70	1.70	.48	271.30
	103.190	283.45	.00	2776.00	1419.09	515.19	841.71	.00	.00	.65	1.55	.44	271.30

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	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	103.230	279.59	.00	640.00	.00	640.00	.00	.00	.00	.00	4.12	.00	272.80
*	103.230	280.80	.00	1165.00	.00	1165.00	.00	.00	.00	.00	5.94	.00	272.80
*	103.230	282.21	.00	1531.00	153.76	663.87	713.37	.00	.00	.56	2.72	.60	272.80
*	103.230	282.52	.00	1742.00	212.72	674.33	854.95	.00	.00	.61	2.65	.61	272.80
*	103.230	282.73	.00	1985.00	268.50	715.93	1000.57	.00	.00	.67	2.74	.64	272.80
*	103.230	282.91	.00	2198.00	319.68	749.71	1128.61	.00	.00	.71	2.80	.67	272.80
*	103.230	283.03	.00	2378.00	361.42	782.06	1234.51	.00	.00	.75	2.88	.70	272.80
*	103.230	283.33	.00	2857.00	475.98	864.75	1516.27	.00	.00	.85	3.06	.76	272.80
*	103.230	283.52	.00	2776.00	484.36	802.70	1488.94	.00	.00	.80	2.78	.70	272.80
	103.240	279.70	.00	640.00	.00	640.00	.00	640.00	.00	.00	4.02	.00	272.80
	103.240	281.58	.00	1165.00	.00	1165.00	.00	1165.00	.00	.00	5.23	.00	272.80
*	103.240	283.89	.00	1531.00	.00	1531.00	.00	1531.00	.00	.00	5.08	.00	272.80
*	103.240	284.87	.00	1742.00	384.28	381.00	976.73	1628.87	114.71	.38	1.14	.31	272.80
*	103.240	285.08	.00	1985.00	448.63	419.70	1116.66	1626.79	372.46	.42	1.23	.34	272.80
*	103.240	285.19	.00	2198.00	503.38	456.08	1238.54	1605.93	594.02	.46	1.32	.36	272.80
*	103.240	285.28	.00	2378.00	549.74	486.79	1341.47	1597.19	785.21	.49	1.40	.38	272.80
*	103.240	285.49	.00	2857.00	675.69	567.28	1614.03	1563.57	1312.62	.57	1.59	.44	272.80
*	103.240	285.48	.00	2776.00	656.23	551.54	1568.23	1492.35	1299.82	.55	1.55	.43	272.80
*	103.400	281.79	.00	640.00	.00	640.00	.00	.00	.00	.00	2.50	.00	275.90
*	103.400	283.67	.00	1165.00	22.52	1098.93	43.54	.00	.00	.50	2.86	.57	275.90
*	103.400	285.27	.00	1531.00	115.01	1228.93	187.05	.00	.00	.64	2.49	.64	275.90
*	103.400	285.01	.00	1742.00	113.56	1443.34	185.11	.00	.00	.76	3.04	.77	275.90
*	103.400	285.23	.00	1985.00	145.92	1601.76	237.32	.00	.00	.84	3.27	.84	275.90
*	103.400	285.37	.00	2198.00	172.88	1743.87	281.25	.00	.00	.91	3.49	.91	275.90
*	103.400	285.48	.00	2378.00	196.25	1862.19	319.56	.00	.00	.97	3.68	.96	275.90
*	103.400	285.73	.00	2857.00	262.06	2166.55	428.38	.00	.00	1.12	4.14	1.10	275.90
*	103.400	285.72	.00	2776.00	252.92	2109.79	413.29	.00	.00	1.09	4.04	1.07	275.90
*	103.690	285.53	.00	640.00	.00	640.00	.00	.00	.00	.00	4.11	.00	281.00
*	103.690	286.95	.00	1165.00	.00	1165.00	.00	.00	.00	.00	4.97	.00	281.00
*	103.690	287.36	.00	1531.00	.00	1531.00	.00	.00	.00	.00	5.85	.00	281.00
*	103.690	287.97	.00	1742.00	.00	1742.00	.00	.00	.00	.00	5.74	.00	281.00
*	103.690	288.39	286.14	1985.00	.00	1935.75	49.25	.00	.00	.00	5.77	.50	281.00
*	103.690	288.69	286.45	2198.00	27.69	1975.00	195.31	.00	.00	.49	5.51	.78	281.00
*	103.690	288.89	.00	2378.00	73.64	1977.89	326.47	.00	.00	.63	5.28	.92	281.00
*	103.690	289.29	.00	2857.00	250.19	1977.26	629.55	.00	.00	.78	4.84	1.09	281.00
*	103.690	289.23	.00	2776.00	213.73	1982.55	579.72	.00	.00	.76	4.92	1.07	281.00
	103.700	285.53	.00	640.00	.00	640.00	.00	640.00	.00	.00	4.11	.00	281.00
	103.700	287.62	.00	1165.00	.00	1165.00	.00	1165.00	.00	.00	4.17	.00	281.00
	103.700	288.08	.00	1531.00	.00	1531.00	.00	1250.70	291.81	.00	4.91	.00	281.00
	103.700	288.38	.00	1742.00	.00	1699.94	42.05	1074.22	670.00	.00	5.07	.44	281.00
	103.700	288.63	.00	1985.00	17.62	1815.82	151.56	935.38	1063.31	.40	5.13	.68	281.00
	103.700	288.80	.00	2198.00	50.28	1887.73	259.99	817.02	1392.43	.56	5.13	.83	281.00
	103.700	288.92	.00	2378.00	83.43	1947.50	347.07	730.48	1663.60	.63	5.16	.92	281.00
	103.700	289.30	.00	2857.00	256.80	1963.70	636.50	538.34	2299.91	.78	4.80	1.09	281.00
	103.700	289.25	.00	2776.00	229.12	1950.14	596.73	566.15	2205.32	.76	4.81	1.07	281.00

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SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN

*	103.850	288.06	.00	640.00	.00	640.00	.00	.00	.00	.00	2.91	.00	282.20
*	103.850	289.79	.00	1165.00	42.96	1122.04	.00	.00	.00	.40	3.35	.00	282.20
*	103.850	290.41	.00	1531.00	203.44	1326.99	.57	.00	.00	.64	3.48	.15	282.20
*	103.850	290.69	.00	1742.00	306.53	1430.64	4.83	.00	.00	.75	3.56	.26	282.20
*	103.850	290.91	.00	1985.00	413.61	1556.07	15.31	.00	.00	.84	3.72	.36	282.20
*	103.850	291.06	.00	2198.00	502.37	1667.77	27.85	.00	.00	.92	3.89	.41	282.20
*	103.850	291.18	.00	2378.00	576.46	1759.28	42.26	.00	.00	.99	4.02	.45	282.20
	103.850	291.36	.00	2857.00	750.34	2027.90	78.75	.00	.00	1.15	4.50	.58	282.20
	103.850	291.33	.00	2776.00	718.84	1986.08	71.08	.00	.00	1.13	4.43	.56	282.20
	103.860	288.35	.00	640.00	.00	640.00	.00	640.00	.00	.00	2.68	.00	282.20
	103.860	290.03	.00	1165.00	81.48	1083.52	.00	614.63	550.96	.45	3.07	.00	282.20
	103.860	290.42	.00	1531.00	203.80	1326.63	.58	411.17	1121.18	.64	3.48	.15	282.20
	103.860	290.69	.00	1742.00	306.02	1431.19	4.79	343.36	1403.42	.75	3.57	.26	282.20
	103.860	290.91	.00	1985.00	413.20	1556.57	15.23	314.80	1670.81	.84	3.73	.36	282.20
	103.860	291.06	.00	2198.00	502.35	1667.80	27.85	305.15	1893.54	.92	3.89	.41	282.20
	103.860	291.18	.00	2378.00	576.58	1759.11	42.31	302.93	2097.73	.99	4.02	.45	282.20
	103.860	291.36	.00	2857.00	751.43	2026.22	79.35	313.33	2524.38	1.15	4.49	.58	282.20
	103.860	291.33	.00	2776.00	720.30	1983.86	71.84	314.80	2462.86	1.13	4.42	.56	282.20
*	103.920	288.87	.00	377.00	.00	377.00	.00	.00	.00	.00	2.10	.00	284.00
*	103.920	290.54	.00	718.00	.00	718.00	.00	.00	.00	.00	2.59	.00	284.00
*	103.920	291.01	.00	950.00	17.62	932.38	.00	.00	.00	.27	3.03	.01	284.00
*	103.920	291.27	.00	1102.00	52.52	1047.45	2.03	.00	.00	.41	3.23	.17	284.00
*	103.920	291.52	.00	1301.00	104.78	1184.47	11.75	.00	.00	.52	3.48	.27	284.00
*	103.920	291.71	.00	1477.00	157.83	1291.76	27.41	.00	.00	.61	3.67	.34	284.00
*	103.920	291.85	.00	1627.00	206.88	1374.33	45.79	.00	.00	.67	3.80	.39	284.00
	103.920	292.16	.00	1984.00	340.74	1527.12	116.14	.00	.00	.79	4.00	.53	284.00
	103.920	292.11	.00	1897.00	311.66	1485.67	99.66	.00	.00	.76	3.92	.49	284.00
*	104.000	289.64	.00	377.00	.00	377.00	.00	.00	.00	.00	4.21	.00	286.00
*	104.000	291.29	.00	718.00	.00	718.00	.00	.00	.00	.00	4.53	.00	286.00
*	104.000	291.89	.00	950.00	.00	950.00	.00	.00	.00	.00	5.05	.00	286.00
*	104.000	292.19	.00	1102.00	7.96	1090.26	3.78	.00	.00	.40	5.36	.37	286.00
*	104.000	292.49	.00	1301.00	39.69	1238.11	23.20	.00	.00	.74	5.66	.63	286.00
*	104.000	292.71	.00	1477.00	76.80	1349.31	50.89	.00	.00	.93	5.86	.78	286.00
*	104.000	292.88	.00	1627.00	111.40	1435.59	80.01	.00	.00	1.07	6.01	.87	286.00
*	104.000	293.21	.00	1984.00	197.69	1624.04	162.26	.00	.00	1.31	6.35	1.05	286.00
*	104.000	293.14	.00	1897.00	176.21	1580.09	140.70	.00	.00	1.25	6.27	1.01	286.00
	104.130	293.98	.00	377.00	.00	377.00	.00	.00	.00	.00	5.11	.00	288.80
	104.130	295.33	.00	718.00	.00	718.00	.00	.00	.00	.00	6.91	.00	288.80
	104.130	296.02	294.50	950.00	.63	865.06	84.31	.00	.00	.30	7.18	1.12	288.80
	104.130	296.34	294.90	1102.00	6.77	945.47	149.76	.00	.00	.54	7.38	1.28	288.80
	104.130	296.65	295.39	1301.00	22.83	1038.65	239.51	.00	.00	.73	7.67	1.42	288.80
	104.130	296.87	296.73	1477.00	43.62	1109.34	324.03	.00	.00	.88	7.88	1.54	288.80
	104.130	297.03	296.90	1627.00	67.83	1161.77	397.40	.00	.00	.99	8.04	1.63	288.80
	104.130	297.36	297.26	1984.00	143.16	1265.87	574.97	.00	.00	1.16	8.29	1.80	288.80
	104.130	297.29	297.16	1897.00	122.14	1242.89	531.97	.00	.00	1.12	8.24	1.76	288.80

	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	104.140	294.12	.00	377.00	.00	377.00	.00	377.00	.00	.00	4.89	.00	288.80
*	104.140	296.66	.00	718.00	.00	582.00	136.00	654.39	57.68	.00	4.29	.80	288.80
*	104.140	297.15	.00	950.00	49.99	650.09	249.92	607.70	342.84	.57	4.40	.92	288.80
*	104.140	297.33	.00	1102.00	76.70	709.20	316.11	578.46	526.68	.64	4.66	1.01	288.80
*	104.140	297.50	.00	1301.00	114.21	787.94	398.85	549.68	752.20	.75	5.04	1.12	288.80
*	104.140	297.63	.00	1477.00	149.59	855.30	472.11	532.05	950.64	.83	5.37	1.21	288.80
*	104.140	297.71	.00	1627.00	176.74	919.34	530.93	517.77	1109.61	.91	5.71	1.30	288.80
	104.140	297.86	.00	1984.00	247.89	1061.05	675.06	485.24	1503.39	1.08	6.44	1.50	288.80
	104.140	297.83	.00	1897.00	230.58	1026.29	640.14	492.70	1406.83	1.04	6.26	1.45	288.80
	104.210	297.14	.00	377.00	111.14	265.86	.00	.00	.00	.89	4.82	.00	290.90
	104.210	298.04	.00	718.00	460.35	252.93	4.73	.00	.00	1.02	3.48	.37	290.90
	104.210	298.41	.00	950.00	656.39	275.01	18.61	.00	.00	1.09	3.44	.55	290.90
	104.210	298.61	.00	1102.00	783.09	288.19	30.72	.00	.00	1.14	3.43	.65	290.90
	104.210	298.85	.00	1301.00	946.33	306.85	47.82	.00	.00	1.20	3.46	.74	290.90
	104.210	299.04	.00	1477.00	1089.32	323.80	63.88	.00	.00	1.25	3.50	.81	290.90
	104.210	299.20	.00	1627.00	1211.03	337.44	78.53	.00	.00	1.29	3.53	.86	290.90
	104.210	299.52	.00	1984.00	1498.19	371.10	114.70	.00	.00	1.38	3.63	.96	290.90
	104.210	299.45	.00	1897.00	1428.37	362.99	105.65	.00	.00	1.36	3.60	.94	290.90
*	104.220	297.16	.00	377.00	117.88	259.12	.00	73.39	305.43	.88	4.65	.00	290.90
	104.220	298.04	.00	718.00	460.31	252.96	4.72	24.56	696.38	1.02	3.48	.37	290.90
	104.220	298.41	.00	950.00	656.35	275.05	18.60	22.75	929.66	1.09	3.44	.55	290.90
	104.220	298.61	.00	1102.00	783.03	288.28	30.69	21.90	1080.27	1.14	3.43	.65	290.90
	104.220	298.85	.00	1301.00	947.11	305.60	48.28	21.63	1291.08	1.19	3.44	.74	290.90
	104.220	299.04	.00	1477.00	1090.01	322.64	64.35	21.46	1464.85	1.24	3.48	.81	290.90
	104.220	299.20	.00	1627.00	1211.64	336.35	79.01	21.23	1611.80	1.28	3.51	.86	290.90
	104.220	299.52	.00	1984.00	1498.71	370.06	115.22	21.40	1966.33	1.37	3.61	.96	290.90
	104.220	299.45	.00	1897.00	1428.90	361.94	106.16	21.31	1878.77	1.35	3.59	.93	290.90
*	104.270	299.00	.00	377.00	213.56	160.12	3.32	.00	.00	.91	3.59	.55	293.30
	104.270	299.43	.00	718.00	469.89	237.35	10.76	.00	.00	1.39	4.81	.87	293.30
	104.270	299.71	.00	950.00	657.89	274.05	18.06	.00	.00	1.59	5.22	1.03	293.30
*	104.270	299.88	.00	1102.00	782.62	295.87	23.51	.00	.00	1.71	5.45	1.11	293.30
*	104.270	300.07	.00	1301.00	947.35	321.75	31.90	.00	.00	1.85	5.70	1.23	293.30
*	104.270	300.24	.00	1477.00	1094.80	341.10	41.10	.00	.00	1.95	5.86	1.33	293.30
*	104.270	300.38	.00	1627.00	1220.70	356.66	49.63	.00	.00	2.03	5.97	1.39	293.30
*	104.270	300.68	.00	1984.00	1520.49	390.71	72.80	.00	.00	2.18	6.20	1.49	293.30
*	104.270	300.61	.00	1897.00	1447.49	382.72	66.79	.00	.00	2.15	6.15	1.47	293.30
	104.340	300.43	.00	377.00	112.66	236.87	27.47	.00	.00	.93	4.76	.69	295.40
	104.340	301.09	.00	718.00	319.06	280.73	118.21	.00	.00	1.23	4.72	1.06	295.40
	104.340	301.40	.00	950.00	455.52	310.54	183.93	.00	.00	1.36	4.83	1.19	295.40
	104.340	301.58	.00	1102.00	544.97	328.16	228.87	.00	.00	1.43	4.89	1.25	295.40
	104.340	301.80	.00	1301.00	660.89	351.76	288.35	.00	.00	1.51	5.00	1.33	295.40
	104.340	301.97	.00	1477.00	761.25	371.43	344.32	.00	.00	1.58	5.10	1.40	295.40
	104.340	302.10	.00	1627.00	846.62	387.54	392.84	.00	.00	1.63	5.18	1.46	295.40
	104.340	302.40	.00	1984.00	1050.12	423.32	510.56	.00	.00	1.73	5.34	1.57	295.40
	104.340	302.33	.00	1897.00	1000.00	415.09	481.91	.00	.00	1.71	5.31	1.54	295.40

18.584	229.18	1560.00	.00	.00	.71	.02	.00	5219.49	4940.14	100.00	643.89
18.584	229.51	2409.00	.00	.00	.33	.02	.00	6892.77	5193.85	100.00	913.44
18.584	229.72	2963.00	.00	.00	.21	.02	.00	7994.37	5357.91	100.00	1062.00
18.584	229.92	3679.00	.00	.00	.20	.02	.00	9377.62	8106.18	100.00	1224.30
18.584	230.12	4491.00	.00	.00	.20	.02	.00	11020.40	8202.42	100.00	1409.69
18.584	230.26	5114.00	.00	.00	.14	.02	.00	12201.09	8233.94	100.00	1548.19
18.584	230.62	6732.00	.00	.00	.36	.02	.00	15142.38	8281.49	100.00	1910.43
18.584	231.47	10959.00	.00	.00	.85	.02	.00	22274.13	8370.75	100.00	2772.15
19.451	229.70	582.00	.00	.00	.00	1.23	.00	1465.16	2755.35	4594.00	418.64
19.451	230.30	1560.00	.00	.00	.60	1.12	.00	5002.44	6507.32	4594.00	1182.91
19.451	230.64	2409.00	.00	.00	.34	1.13	.00	7303.30	6821.45	4594.00	1662.03
19.451	230.83	2963.00	.00	.00	.19	1.11	.00	8613.94	6994.42	4594.00	1937.79
19.451	231.05	3679.00	.00	.00	.22	1.13	.00	10195.69	7183.46	4594.00	2256.43
19.451	231.26	4491.00	.00	.00	.22	1.14	.00	11765.03	7285.30	4594.00	2611.21
19.451	231.41	5114.00	.00	.00	.15	1.15	.00	12803.73	7338.37	4594.00	2866.74
19.451	231.75	6732.00	.00	.00	.34	1.13	.00	15307.03	7474.16	4594.00	3516.09
19.451	232.50	10959.00	.00	.00	.75	1.03	.00	21061.07	7754.50	4594.00	5057.29

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	19.562	229.89	582.00	.00	.00	.00	.20	.00	1464.87	2754.83	600.00	438.82
	19.562	230.48	1560.00	.00	.00	.59	.18	.00	4887.82	6500.37	600.00	1251.03
	19.562	230.80	2409.00	.00	.00	.33	.16	.00	6987.08	6751.83	600.00	1760.45
	19.562	230.99	2963.00	.00	.00	.18	.16	.00	8271.47	6957.49	600.00	2054.08
	19.562	231.20	3679.00	.00	.00	.21	.15	.00	9778.52	7134.09	600.00	2394.00
	19.562	231.41	4491.00	.00	.00	.21	.15	.00	11351.54	7264.21	600.00	2770.41
	19.562	231.56	5114.00	.00	.00	.15	.15	.00	12441.85	7319.69	600.00	3040.61
	19.562	231.90	6732.00	.00	.00	.34	.15	.00	14912.57	7451.62	600.00	3724.21
	19.562	232.65	10959.00	.00	.00	.75	.15	.00	20566.67	7737.34	600.00	5343.98
	19.563	229.89	582.00	230.00	232.50	.00	.00	.00	1466.17	2757.12	16.00	439.35
	19.563	230.48	1560.00	230.00	232.50	.59	.00	.00	4913.51	6501.92	16.00	1252.83
	19.563	230.80	2409.00	230.00	232.50	.33	.00	.00	7072.29	6769.17	16.00	1763.03
*	19.563	230.99	2963.00	230.00	232.50	.18	.00	.00	8348.16	6963.84	16.00	2057.13
*	19.563	231.20	3679.00	230.00	232.50	.21	.00	.00	9838.09	7141.16	16.00	2397.60
*	19.563	231.41	4491.00	230.00	232.50	.21	.00	.00	11370.39	7265.17	16.00	2774.59
*	19.563	231.56	5114.00	230.00	232.50	.15	.00	.00	12457.59	7320.49	16.00	3045.18
	19.563	231.90	6732.00	230.00	232.50	.34	.00	.00	14976.71	7455.26	16.00	3729.70
	19.563	232.65	10959.00	230.00	232.50	.75	.01	.00	20694.45	7741.78	16.00	5351.56
	19.594	229.94	664.00	.00	.00	.00	.05	.00	1621.33	3345.56	150.00	444.67
	19.594	230.52	1687.00	.00	.00	.58	.05	.00	5190.77	6518.73	150.00	1270.22
	19.594	230.85	2500.00	.00	.00	.32	.04	.00	7333.61	6828.27	150.00	1787.83
	19.594	231.03	3116.00	.00	.00	.18	.04	.00	8600.06	6992.74	150.00	2086.31
	19.594	231.24	3963.00	.00	.00	.21	.04	.00	10087.81	7170.72	150.00	2431.91
	19.594	231.45	4749.00	.00	.00	.21	.04	.00	11617.26	7277.77	150.00	2814.17
	19.594	231.60	5290.00	.00	.00	.15	.04	.00	12703.43	7332.94	150.00	3088.51
	19.594	231.94	6707.00	.00	.00	.34	.04	.00	15231.55	7469.85	150.00	3781.71
	19.594	232.69	10174.00	.00	.00	.75	.04	.00	20952.00	7750.72	150.00	5423.27
*	20.021	231.17	664.00	.00	.00	.00	1.23	.00	1075.84	5270.49	2293.00	515.66
*	20.021	231.63	1687.00	.00	.00	.46	1.10	.00	3456.16	5278.75	2293.00	1497.81
*	20.021	231.86	2500.00	.00	.00	.23	1.01	.00	4718.21	5330.81	2293.00	2105.04
*	20.021	232.02	3116.00	.00	.00	.17	.99	.00	5634.90	5693.27	2293.00	2460.98
*	20.021	232.23	3963.00	.00	.00	.21	.99	.00	6846.16	5953.96	2293.00	2877.61
*	20.021	232.40	4749.00	.00	.00	.17	.95	.00	7860.78	6073.65	2293.00	3326.83
*	20.021	232.51	5290.00	.00	.00	.11	.91	.00	8534.96	6102.64	2293.00	3647.50
*	20.021	232.79	6707.00	.00	.00	.28	.85	.00	10266.16	6174.82	2293.00	4452.81
*	20.021	233.42	10174.00	.00	.00	.63	.73	.00	14211.68	6331.78	2293.00	6348.77
*	20.102	231.43	664.00	.00	.00	.00	.26	.00	2425.91	5275.18	400.00	531.74
*	20.102	231.87	1687.00	.00	.00	.44	.24	.00	4736.27	5333.71	400.00	1535.43
*	20.102	232.10	2500.00	.00	.00	.23	.25	.00	6084.82	5862.54	400.00	2154.64
	20.102	232.26	3116.00	.00	.00	.16	.24	.00	7048.89	5978.06	400.00	2519.21
	20.102	232.47	3963.00	.00	.00	.20	.24	.00	8270.28	6091.38	400.00	2947.01
	20.102	232.63	4749.00	.00	.00	.17	.23	.00	9296.16	6134.92	400.00	3405.60
	20.102	232.74	5290.00	.00	.00	.11	.23	.00	9966.08	6162.72	400.00	3732.45
	20.102	233.02	6707.00	.00	.00	.27	.22	.00	11654.70	6230.51	400.00	4553.46
	20.102	233.62	10174.00	.00	.00	.61	.20	.00	15485.43	6381.63	400.00	6485.13

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	20.103	231.43	664.00	232.00	233.50	.00	.00	.00	2471.79	5275.34	14.00	532.52
	20.103	231.87	1687.00	232.00	233.50	.44	.00	.00	4786.11	5341.71	14.00	1536.96
	20.103	232.10	2500.00	232.00	233.50	.23	.00	.00	6096.72	5863.98	14.00	2156.59
	20.103	232.26	3116.00	232.00	233.50	.16	.00	.00	7063.21	5979.76	14.00	2521.48
*	20.103	232.47	3963.00	232.00	233.50	.20	.00	.00	8287.94	6092.13	14.00	2949.68
*	20.103	232.63	4749.00	232.00	233.50	.17	.00	.00	9316.57	6135.78	14.00	3408.59
*	20.103	232.74	5290.00	232.00	233.50	.11	.00	.00	9988.37	6163.62	14.00	3735.65
	20.103	233.02	6707.00	232.00	233.50	.27	.00	.00	11680.94	6231.56	14.00	4557.21
	20.103	233.62	10174.00	232.00	233.50	.61	.00	.00	15521.17	6383.02	14.00	6490.11
	20.124	231.46	664.00	.00	.00	.00	.03	.00	2313.53	5274.02	100.00	538.02
	20.124	231.91	1687.00	.00	.00	.45	.04	.00	4670.97	5287.74	100.00	1547.81
	20.124	232.14	2500.00	.00	.00	.24	.04	.00	5966.56	5736.49	100.00	2170.44
	20.124	232.31	3116.00	.00	.00	.16	.04	.00	6929.21	5937.63	100.00	2537.54
	20.124	232.51	3963.00	.00	.00	.20	.04	.00	8149.80	6076.87	100.00	2968.54
	20.124	232.68	4749.00	.00	.00	.17	.05	.00	9178.21	6120.62	100.00	3429.82
	20.124	232.79	5290.00	.00	.00	.11	.05	.00	9848.92	6148.98	100.00	3758.42
	20.124	233.06	6707.00	.00	.00	.27	.05	.00	11533.06	6216.86	100.00	4583.85
	20.124	233.67	10174.00	.00	.00	.61	.04	.00	15342.49	6367.47	100.00	6525.54
	20.580	232.19	796.00	.00	.00	.00	.72	.00	3065.29	4529.37	2429.00	687.98
	20.580	232.70	1818.00	.00	.00	.52	.79	.00	5437.86	4633.24	2429.00	1829.66
	20.580	233.00	2624.00	.00	.00	.30	.85	.00	6820.61	4679.20	2429.00	2526.96
	20.580	233.19	3251.00	.00	.00	.19	.88	.00	7725.60	4709.02	2429.00	2946.13

	20.580	233.41	3958.00	.00	.00	.22	.89	.00	8744.13	4742.08	2429.00	3439.56
	20.580	233.59	4617.00	.00	.00	.18	.91	.00	9606.39	4757.54	2429.00	3953.56
	20.580	233.70	5046.00	.00	.00	.11	.91	.00	10151.99	4767.33	2429.00	4316.07
	20.580	233.99	6270.00	.00	.00	.29	.93	.00	11560.32	5025.39	2429.00	5227.72
	20.580	234.59	9121.00	.00	.00	.60	.92	.00	14809.32	5836.66	2429.00	7366.20
	20.600	232.21	796.00	.00	.00	.00	.03	.00	3140.34	4473.58	100.00	695.11
	20.600	232.73	1818.00	.00	.00	.52	.03	.00	5517.63	4619.39	100.00	1842.23
	20.600	233.03	2624.00	.00	.00	.30	.03	.00	6900.41	4664.87	100.00	2542.71
	20.600	233.22	3251.00	.00	.00	.19	.03	.00	7809.53	4693.52	100.00	2963.97
	20.600	233.44	3958.00	.00	.00	.22	.03	.00	8829.10	4725.46	100.00	3459.74
	20.600	233.62	4617.00	.00	.00	.18	.03	.00	9691.92	4743.57	100.00	3975.71
	20.600	233.73	5046.00	.00	.00	.11	.03	.00	10236.52	4752.52	100.00	4339.47
	20.600	234.02	6270.00	.00	.00	.29	.03	.00	11629.31	4974.16	100.00	5254.34
	20.600	234.62	9121.00	.00	.00	.60	.03	.00	14811.63	5744.17	100.00	7400.20
*	21.059	233.48	796.00	.00	.00	.00	1.26	.00	196.50	36.27	2376.00	786.11
*	21.059	234.19	1818.00	.00	.00	.71	1.46	.00	853.75	1984.43	2376.00	2016.00
*	21.059	234.55	2624.00	.00	.00	.36	1.52	.00	1995.29	3948.63	2376.00	2785.32
*	21.059	234.76	3251.00	.00	.00	.21	1.54	.00	2874.27	3986.46	2376.00	3255.34
*	21.059	234.96	3958.00	.00	.00	.20	1.52	.00	3620.20	4018.28	2376.00	3799.26
*	21.059	235.12	4617.00	.00	.00	.16	1.50	.00	4284.28	4046.40	2376.00	4356.88
*	21.059	235.22	5046.00	.00	.00	.10	1.49	.00	4689.66	4068.48	2376.00	4746.55
*	21.059	235.49	6270.00	.00	.00	.27	1.47	.00	5809.82	4180.85	2376.00	5729.95
*	21.059	236.04	9121.00	.00	.00	.55	1.42	.00	8234.91	4662.28	2376.00	8028.74

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
*	21.501	237.01	796.00	.00	.00	.00	3.53	.00	312.98	47.52	2376.00	800.01
*	21.501	237.94	1818.00	.00	.00	.94	3.75	.00	3066.18	3526.98	2376.00	2122.90
*	21.501	238.21	2624.00	.00	.00	.27	3.67	.00	4001.23	3775.77	2376.00	2948.86
*	21.501	238.35	3251.00	.00	.00	.14	3.59	.00	4555.88	3940.19	2376.00	3457.98
*	21.501	238.51	3958.00	.00	.00	.16	3.55	.00	5207.30	4130.06	2376.00	4040.01
*	21.501	238.64	4617.00	.00	.00	.13	3.52	.00	5745.89	4313.36	2376.00	4630.43
*	21.501	238.72	5046.00	.00	.00	.08	3.50	.00	6091.51	4399.61	2376.00	5040.58
	21.501	238.92	6270.00	.00	.00	.20	3.43	.00	6996.73	4643.64	2376.00	6079.22
	21.501	239.32	9121.00	.00	.00	.40	3.27	.00	8929.90	4979.33	2376.00	8496.87
	21.582	237.34	796.00	.00	.00	.00	.33	.00	324.12	48.50	400.00	802.93
	21.582	238.18	1818.00	.00	.00	.84	.24	.00	3525.91	3618.11	400.00	2153.17
	21.582	238.48	2624.00	.00	.00	.30	.26	.00	4657.17	3969.48	400.00	2988.62
	21.582	238.65	3251.00	.00	.00	.17	.29	.00	5307.97	4166.91	400.00	3503.27
	21.582	238.82	3958.00	.00	.00	.17	.31	.00	6064.23	4396.08	400.00	4091.76
	21.582	238.97	4617.00	.00	.00	.15	.33	.00	6743.45	4559.67	400.00	4687.77
	21.582	239.06	5046.00	.00	.00	.09	.34	.00	7141.25	4681.55	400.00	5101.34
	21.582	239.28	6270.00	.00	.00	.23	.36	.00	8246.12	4955.06	400.00	6149.21
	21.582	239.72	9121.00	.00	.00	.44	.40	.00	10438.37	5059.48	400.00	8585.80
	21.583	237.34	796.00	237.80	239.10	.00	.00	.00	324.36	48.52	16.00	803.05
	21.583	238.18	1818.00	237.80	239.10	.84	.00	.00	3537.34	3620.34	16.00	2154.47
	21.583	238.48	2624.00	237.80	239.10	.30	.00	.00	4672.02	3973.75	16.00	2990.33
	21.583	238.65	3251.00	237.80	239.10	.17	.00	.00	5358.50	4185.29	16.00	3505.23
	21.583	238.82	3958.00	237.80	239.10	.17	.00	.00	6108.93	4401.86	16.00	4094.00
	21.583	238.97	4617.00	237.80	239.10	.15	.00	.00	6784.71	4575.23	16.00	4690.26
	21.583	239.06	5046.00	237.80	239.10	.09	.00	.00	7181.66	4692.10	16.00	5103.97
*	21.583	239.28	6270.00	237.80	239.10	.23	.00	.00	8288.92	4956.58	16.00	6152.25
*	21.583	239.72	9121.00	237.80	239.10	.44	.00	.00	10485.86	5060.93	16.00	8589.64
	21.604	237.40	945.00	.00	.00	.00	.06	.00	322.25	48.33	100.00	803.79
	21.604	238.22	1980.00	.00	.00	.82	.04	.00	3336.21	3580.78	100.00	2162.36
	21.604	238.53	2784.00	.00	.00	.30	.05	.00	4466.68	3914.21	100.00	3000.82
	21.604	238.70	3344.00	.00	.00	.17	.05	.00	5165.24	4114.56	100.00	3517.31
	21.604	238.88	3957.00	.00	.00	.18	.06	.00	5918.44	4363.81	100.00	4107.80
	21.604	239.03	4532.00	.00	.00	.15	.06	.00	6595.89	4503.56	100.00	4705.61
	21.604	239.12	4907.00	.00	.00	.09	.06	.00	6995.34	4643.27	100.00	5120.24
	21.604	239.35	6113.00	.00	.00	.23	.07	.00	8107.75	4950.13	100.00	6171.07
	21.604	239.79	8384.00	.00	.00	.44	.07	.00	10330.71	5056.19	100.00	8613.54
	22.009	239.40	945.00	.00	.00	.00	1.99	.00	333.68	229.20	2112.00	819.69
*	22.009	240.03	1980.00	.00	.00	.63	1.81	.00	1938.63	3322.80	2112.00	2290.23
*	22.009	240.34	2784.00	.00	.00	.31	1.81	.00	3025.35	3518.76	2112.00	3182.44
*	22.009	240.52	3344.00	.00	.00	.18	1.82	.00	3675.60	3660.35	2112.00	3731.63
*	22.009	240.69	3957.00	.00	.00	.17	1.82	.00	4316.72	3870.14	2112.00	4355.93
*	22.009	240.84	4532.00	.00	.00	.14	1.81	.00	4897.76	4038.20	2112.00	4984.25
	22.009	240.93	4907.00	.00	.00	.09	1.81	.00	5271.41	4153.56	2112.00	5417.62
	22.009	241.19	6113.00	.00	.00	.27	1.85	.00	6444.32	4445.19	2112.00	6523.84
	22.009	241.60	8384.00	.00	.00	.41	1.81	.00	8351.18	4958.80	2112.00	9066.43

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	22.450	242.15	945.00	.00	.00	.00	2.75	.00	282.99	78.80	2368.00	836.43
	22.450	244.08	1980.00	.00	.00	1.93	4.06	.00	842.49	651.93	2368.00	2363.47
	22.450	244.45	2784.00	.00	.00	.37	4.11	.00	1686.38	2482.53	2368.00	3306.03
	22.450	244.62	3344.00	.00	.00	.17	4.10	.00	2131.44	2580.09	2368.00	3883.82
	22.450	244.78	3957.00	.00	.00	.17	4.09	.00	2579.40	2692.86	2368.00	4536.58
*	22.450	244.92	4532.00	.00	.00	.13	4.08	.00	2942.59	2738.25	2368.00	5189.61
*	22.450	245.00	4907.00	.00	.00	.08	4.07	.00	3160.50	2765.13	2368.00	5638.47
*	22.450	245.23	6113.00	.00	.00	.23	4.03	.00	3783.03	2803.95	2368.00	6791.79
*	22.450	245.61	8384.00	.00	.00	.39	4.01	.00	4888.26	2872.23	2368.00	9413.51
	22.602	243.18	945.00	.00	.00	.00	1.03	.00	326.02	54.42	800.00	842.02
	22.602	245.47	1980.00	.00	.00	2.29	1.38	.00	1035.05	820.30	800.00	2381.54
	22.602	246.05	2784.00	.00	.00	.58	1.60	.00	1604.40	1260.28	800.00	3338.03
	22.602	246.31	3344.00	.00	.00	.27	1.69	.00	1974.64	1518.20	800.00	3923.58
	22.602	246.55	3957.00	.00	.00	.24	1.77	.00	2359.01	1712.43	800.00	4584.21
	22.602	246.74	4532.00	.00	.00	.19	1.82	.00	2701.90	1874.60	800.00	5243.87
	22.602	246.85	4907.00	.00	.00	.11	1.85	.00	2925.53	2063.51	800.00	5696.82

	22.602	247.17	6113.00	.00	.00	.32	1.95	.00	3658.64	2610.89	800.00	6862.50
	22.602	247.63	8384.00	.00	.00	.46	2.02	.00	4927.60	2936.24	800.00	9505.63
	22.603	243.21	945.00	244.10	246.00	.00	.03	.00	327.71	54.60	15.00	842.14
	22.603	245.47	1980.00	244.10	246.00	2.26	.00	.00	1034.83	820.19	15.00	2381.89
	22.603	246.05	2784.00	244.10	246.00	.58	.00	.00	1604.78	1260.60	15.00	3338.59
	22.603	246.31	3344.00	244.10	246.00	.27	.00	.00	1981.14	1521.67	15.00	3924.27
	22.603	246.55	3957.00	244.10	246.00	.24	.00	.00	2363.19	1714.21	15.00	4585.02
	22.603	246.74	4532.00	244.10	246.00	.19	.00	.00	2699.33	1872.65	15.00	5244.80
	22.603	246.85	4907.00	244.10	246.00	.11	.00	.00	2915.19	2053.89	15.00	5697.83
	22.603	247.17	6113.00	244.10	246.00	.32	.00	.00	3658.92	2610.97	15.00	6863.76
*	22.603	247.63	8384.00	244.10	246.00	.46	.00	.00	4937.82	2938.71	15.00	9507.33
	22.644	243.44	1072.00	.00	.00	.00	.23	.00	340.57	56.02	225.00	843.86
	22.644	245.83	2113.00	.00	.00	2.39	.36	.00	1348.78	993.72	225.00	2391.73
	22.644	246.48	2931.00	.00	.00	.65	.43	.00	2235.56	1655.67	225.00	3355.16
	22.644	246.78	3476.00	.00	.00	.30	.46	.00	2769.62	1925.09	225.00	3944.80
	22.644	247.04	4097.00	.00	.00	.26	.49	.00	3335.77	2309.82	225.00	4609.56
	22.644	247.25	4709.00	.00	.00	.21	.51	.00	3872.23	2668.43	225.00	5272.93
	22.644	247.38	5103.00	.00	.00	.12	.53	.00	4206.88	2756.17	225.00	5728.20
	22.644	247.72	6378.00	.00	.00	.35	.55	.00	5205.08	3002.69	225.00	6901.15
	22.644	248.21	8338.00	.00	.00	.49	.58	.00	6734.91	3241.56	225.00	9555.97
	100.190	244.73	1072.00	.00	.00	.00	1.30	.00	361.17	64.67	980.00	851.76
	100.190	247.13	2113.00	.00	.00	2.39	1.30	.00	560.66	289.89	980.00	2413.36
*	100.190	247.80	2931.00	.00	.00	.67	1.32	.00	1076.85	1398.38	980.00	3391.96
*	100.190	248.09	3476.00	.00	.00	.29	1.32	.00	1582.64	2110.41	980.00	3992.74
*	100.190	248.36	4097.00	.00	.00	.27	1.32	.00	2190.18	2437.15	980.00	4669.99
*	100.190	248.57	4709.00	.00	.00	.22	1.32	.00	2730.77	2654.34	980.00	5344.80
*	100.190	248.69	5103.00	.00	.00	.12	1.32	.00	3073.82	2705.86	980.00	5807.26
	100.190	249.04	6378.00	.00	.00	.35	1.32	.00	4043.40	2945.20	980.00	7001.19
	100.190	249.48	8338.00	.00	.00	.44	1.27	.00	5467.42	3401.96	980.00	9687.78

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	100.640	248.41	1072.00	.00	.00	.00	3.68	.00	432.74	123.20	2376.00	873.41
	100.640	250.87	2113.00	.00	.00	2.46	3.74	.00	767.52	149.24	2376.00	2449.51
	100.640	251.96	2931.00	.00	.00	1.09	4.16	.00	931.29	152.03	2376.00	3445.45
	100.640	252.45	3476.00	.00	.00	.49	4.36	.00	1006.68	153.04	2376.00	4060.71
	100.640	252.89	4097.00	.00	.00	.44	4.53	.00	1072.71	153.91	2376.00	4754.66
	100.640	253.24	4709.00	.00	.00	.35	4.67	.00	1127.21	154.64	2376.00	5444.19
	100.640	253.44	5103.00	.00	.00	.20	4.75	.00	1158.54	155.05	2376.00	5915.91
	100.640	254.05	6378.00	.00	.00	.61	5.01	.00	1252.97	156.29	2376.00	7136.08
	100.640	254.78	8338.00	.00	.00	.73	5.30	.00	1366.88	157.00	2376.00	9860.27
	100.640	248.42	1072.00	255.50	253.50	.00	.01	.00	433.94	123.23	10.00	873.51
	100.640	250.88	2113.00	255.50	253.50	2.46	.01	.00	767.66	149.24	10.00	2449.69
	100.640	251.97	2931.00	255.50	253.50	1.09	.01	.00	931.82	152.04	10.00	3445.66
	100.640	252.46	3476.00	255.50	253.50	.49	.01	.00	1007.33	153.04	10.00	4060.94
	100.640	252.90	4097.00	255.50	253.50	.44	.02	.00	1075.27	153.95	10.00	4754.91
	100.640	253.62	4709.00	255.50	253.50	.72	.38	.00	1186.39	155.41	10.00	5444.46
	100.640	253.91	5103.00	255.50	253.50	.29	.47	.00	1231.47	156.00	10.00	5916.18
	100.640	254.87	6378.00	255.50	253.50	.96	.82	.00	1381.26	157.00	10.00	7136.38
*	100.640	255.81	8338.00	255.50	253.50	.95	1.03	.00	7830.95	2377.00	10.00	9861.33
	100.750	249.33	1072.00	.00	.00	.00	.91	.00	447.39	123.58	581.00	879.38
	100.750	251.61	2113.00	.00	.00	2.28	.73	.00	757.01	148.91	581.00	2459.86
	100.750	252.71	2931.00	.00	.00	1.11	.75	.00	1006.50	617.91	581.00	3458.46
	100.750	253.26	3476.00	.00	.00	.55	.80	.00	1513.77	1295.21	581.00	4076.89
	100.750	253.77	4097.00	.00	.00	.51	.86	.00	2318.79	1966.09	581.00	4775.18
*	100.750	254.40	4709.00	.00	.00	.63	.78	.00	4205.65	3470.87	581.00	5473.69
*	100.750	254.68	5103.00	.00	.00	.28	.77	.00	5270.33	3841.62	581.00	5950.37
*	100.750	255.59	6378.00	.00	.00	.91	.73	.00	9005.43	4363.16	581.00	7187.99
	100.750	256.03	8338.00	.00	.00	.43	.22	.00	10943.85	4515.68	581.00	9955.01
*	101.080	252.94	1072.00	.00	.00	.00	3.61	.00	265.69	57.60	1742.00	893.64
*	101.080	255.11	2113.00	.00	.00	2.17	3.50	.00	406.24	70.38	1742.00	2483.12
*	101.080	256.31	2931.00	.00	.00	1.20	3.59	.00	493.68	75.02	1742.00	3487.99
*	101.080	256.40	3476.00	.00	.00	.10	3.14	.00	500.89	75.35	1742.00	4114.58
*	101.080	256.51	4097.00	.00	.00	.11	2.74	.00	1961.72	1368.28	1742.00	4846.94
*	101.080	256.55	4709.00	.00	.00	.04	2.15	.00	2012.86	1376.83	1742.00	5578.29
*	101.080	256.57	5103.00	.00	.00	.02	1.89	.00	2064.11	1385.34	1742.00	6073.68
*	101.080	256.72	6378.00	.00	.00	.15	1.13	.00	2256.91	1416.92	1742.00	7376.77
*	101.080	257.22	8338.00	.00	.00	.50	1.19	.00	2992.23	1541.96	1742.00	10186.95
	101.090	252.96	1072.00	256.70	257.80	.00	.01	.00	266.58	57.80	44.00	893.91
	101.090	255.14	2113.00	256.70	257.80	2.18	.03	.00	408.30	70.51	44.00	2483.53
*	101.090	256.35	2931.00	256.70	257.80	1.22	.05	.00	497.63	75.20	44.00	3488.49
	101.090	256.40	3476.00	256.70	257.80	.05	.00	.00	501.41	75.38	44.00	4115.09
	101.090	257.00	4097.00	256.70	257.80	.59	.49	.00	2658.60	1483.84	44.00	4849.28
*	101.090	257.16	4709.00	256.70	257.80	.16	.61	.00	2902.38	1526.53	44.00	5580.77
*	101.090	257.26	5103.00	256.70	257.80	.11	.69	.00	3064.85	1554.33	44.00	6076.27
*	101.090	257.60	6378.00	256.70	257.80	.34	.88	.00	3603.93	1643.20	44.00	7379.73
*	101.090	258.13	8338.00	256.70	257.80	.53	.91	.00	4548.62	2097.59	44.00	10190.76

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	101.220	255.17	1072.00	.00	.00	.00	2.21	.00	291.38	61.85	739.00	898.64
	101.220	257.52	2113.00	.00	.00	2.35	2.39	.00	954.56	1115.39	739.00	2494.86
*	101.220	258.48	2931.00	.00	.00	.95	2.12	.00	2197.52	1407.27	739.00	3510.60
*	101.220	258.85	3476.00	.00	.00	.38	2.45	.00	2751.90	1558.60	739.00	4141.70
	101.220	258.44	4097.00	.00	.00	-.42	1.44	.00	2140.08	1397.87	739.00	4888.31
	101.220	258.67	4709.00	.00	.00	.23	1.51	.00	2473.67	1468.13	739.00	5624.46
	101.220	258.81	5103.00	.00	.00	.14	1.54	.00	2679.95	1535.47	739.00	6122.93
	101.220	259.20	6378.00	.00	.00	.39	1.60	.00	3325.40	1731.95	739.00	7435.92
	101.220	259.71	8338.00	.00	.00	.51	1.58	.00	4339.48	2716.42	739.00	10262.71

	101.780	262.53	1072.00	.00	.00	.00	7.35	.00	519.10	442.78	2957.00	923.52
	101.780	263.56	2113.00	.00	.00	1.03	6.03	.00	1530.75	1549.27	2957.00	2562.17
*	101.780	263.62	2931.00	.00	.00	.06	5.14	.00	1626.28	1715.28	2957.00	3610.90
*	101.780	263.74	3476.00	.00	.00	.12	4.88	.00	1830.91	1802.35	2957.00	4260.65
	101.780	264.36	4097.00	.00	.00	.63	5.92	.00	3060.69	2166.01	2957.00	5022.14
	101.780	264.53	4709.00	.00	.00	.16	5.86	.00	3429.66	2286.98	2957.00	5775.49
	101.780	264.63	5103.00	.00	.00	.10	5.82	.00	3657.86	2353.03	2957.00	6284.60
	101.780	264.92	6378.00	.00	.00	.29	5.71	.00	4374.22	2532.18	2957.00	7630.99
	101.780	265.29	8338.00	.00	.00	.37	5.58	.00	5587.61	3512.23	2957.00	10513.28
	101.790	262.53	1072.00	262.00	264.10	.00	.00	.00	520.76	443.59	23.00	923.80
	101.790	263.56	2113.00	262.00	264.10	1.03	.00	.00	1526.31	1545.57	23.00	2562.97
	101.790	263.62	2931.00	262.00	264.10	.07	.00	.00	1638.34	1720.90	23.00	3611.76
*	101.790	263.74	3476.00	262.00	264.10	.12	.00	.00	1851.36	1809.57	23.00	4261.63
*	101.790	264.36	4097.00	262.00	264.10	.62	.00	.00	3049.53	2162.16	23.00	5023.76
*	101.790	264.53	4709.00	262.00	264.10	.16	.00	.00	3415.30	2282.75	23.00	5777.30
*	101.790	264.63	5103.00	262.00	264.10	.10	.00	.00	3656.42	2352.62	23.00	6286.53
*	101.790	264.92	6378.00	262.00	264.10	.29	.00	.00	4359.70	2528.38	23.00	7633.30
	101.790	265.29	8338.00	262.00	264.10	.37	.00	.00	5587.72	3512.31	23.00	10516.23
	101.900	263.94	852.00	.00	.00	.00	1.41	.00	439.49	401.96	634.00	930.79
	101.900	264.91	1687.00	.00	.00	.97	1.35	.00	1173.64	1385.65	634.00	2582.62
	101.900	265.41	2419.00	.00	.00	.49	1.78	.00	1974.59	1848.15	634.00	3638.05
	101.900	265.63	2874.00	.00	.00	.22	1.89	.00	2377.60	1923.81	634.00	4292.40
	101.900	265.70	3366.00	.00	.00	.08	1.34	.00	2521.30	1950.08	634.00	5064.30
	101.900	265.88	3849.00	.00	.00	.17	1.35	.00	2868.70	2094.84	634.00	5823.03
	101.900	265.98	4160.00	.00	.00	.10	1.35	.00	3087.51	2195.99	634.00	6335.61
	101.900	266.26	5104.00	.00	.00	.29	1.34	.00	3767.35	2436.93	634.00	7692.44
	101.900	266.60	6170.00	.00	.00	.33	1.30	.00	4631.43	3022.08	634.00	10590.60
	102.320	268.06	852.00	.00	.00	.00	4.12	.00	270.65	48.01	2218.00	948.83
	102.320	270.47	1687.00	.00	.00	2.40	5.56	.00	682.48	886.49	2218.00	2629.64
	102.320	270.92	2419.00	.00	.00	.45	5.51	.00	1126.73	1131.50	2218.00	3716.53
*	102.320	271.12	2874.00	.00	.00	.20	5.49	.00	1383.31	1382.56	2218.00	4387.54
	102.320	271.42	3366.00	.00	.00	.30	5.72	.00	1829.73	1523.20	2218.00	5174.35
	102.320	271.58	3849.00	.00	.00	.15	5.70	.00	2077.63	1586.78	2218.00	5948.12
	102.320	271.67	4160.00	.00	.00	.09	5.69	.00	2231.22	1624.93	2218.00	6470.10
	102.320	271.91	5104.00	.00	.00	.25	5.65	.00	2638.62	1697.97	2218.00	7854.40
	102.320	272.13	6170.00	.00	.00	.22	5.53	.00	2998.28	1752.56	2218.00	10783.47

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	102.600	271.18	852.00	.00	.00	.00	3.12	.00	243.42	45.98	1478.00	957.55
	102.600	274.46	1687.00	.00	.00	3.28	3.99	.00	957.27	1008.76	1478.00	2657.46
	102.600	275.00	2419.00	.00	.00	.54	4.08	.00	1638.13	1476.17	1478.00	3763.44
	102.600	275.22	2874.00	.00	.00	.22	4.10	.00	1981.14	1562.34	1478.00	4444.62
	102.600	275.37	3366.00	.00	.00	.15	3.95	.00	2213.34	1620.54	1478.00	5242.94
	102.600	275.55	3849.00	.00	.00	.18	3.97	.00	2509.30	1682.57	1478.00	6025.93
	102.600	275.65	4160.00	.00	.00	.11	3.98	.00	2689.18	1703.95	1478.00	6553.58
	102.600	275.96	5104.00	.00	.00	.30	4.04	.00	3217.00	1769.31	1478.00	7953.74
	102.600	276.27	6170.00	.00	.00	.32	4.14	.00	3782.70	1792.76	1478.00	10898.51
	102.900	275.19	852.00	.00	.00	.00	4.01	.00	223.38	36.82	1585.00	966.04
	102.900	277.18	1687.00	.00	.00	1.99	2.72	.00	1537.42	1631.15	1585.00	2697.05
	102.900	277.55	2419.00	.00	.00	.38	2.55	.00	2177.14	1774.87	1585.00	3822.62
	102.900	277.74	2874.00	.00	.00	.19	2.52	.00	2533.24	1850.04	1585.00	4514.24
	102.900	277.95	3366.00	.00	.00	.21	2.58	.00	2934.09	1935.19	1585.00	5322.08
	102.900	278.12	3849.00	.00	.00	.17	2.58	.00	3265.35	1996.84	1585.00	6114.43
	102.900	278.22	4160.00	.00	.00	.10	2.57	.00	3468.48	2011.53	1585.00	6647.79
	102.900	278.51	5104.00	.00	.00	.28	2.55	.00	4038.08	2076.01	1585.00	8064.29
	102.900	278.79	6170.00	.00	.00	.28	2.52	.00	4633.18	2171.98	1585.00	11026.30
*	102.930	275.55	852.00	.00	.00	.00	.36	.00	453.64	65.42	150.00	967.21
	102.930	277.35	1687.00	.00	.00	1.80	.18	.00	724.69	368.62	150.00	2699.90
	102.930	277.73	2419.00	.00	.00	.38	.18	.00	888.63	503.70	150.00	3826.31
	102.930	277.91	2874.00	.00	.00	.19	.17	.00	988.04	570.23	150.00	4518.41
	102.930	278.11	3366.00	.00	.00	.20	.16	.00	1106.24	640.41	150.00	5326.79
*	102.930	278.27	3849.00	.00	.00	.16	.15	.00	1215.04	698.79	150.00	6119.61
*	102.930	278.37	4160.00	.00	.00	.10	.14	.00	1283.16	732.99	150.00	6653.25
*	102.930	278.63	5104.00	.00	.00	.26	.12	.00	1488.26	827.46	150.00	8070.57
*	102.930	278.89	6170.00	.00	.00	.26	.10	.00	1717.36	921.60	150.00	11033.47
	102.950	275.60	852.00	.00	.00	.00	.05	.00	456.82	65.61	100.00	968.25
	102.950	277.48	1687.00	.00	.00	1.88	.13	.00	647.34	120.00	100.00	2701.51
	102.950	277.93	2419.00	.00	.00	.45	.20	.00	851.10	384.85	100.00	3828.54
	102.950	278.16	2874.00	.00	.00	.23	.25	.00	948.47	440.18	100.00	4520.96
	102.950	278.40	3366.00	.00	.00	.24	.29	.00	1054.67	493.49	100.00	5329.73
	102.950	278.61	3849.00	.00	.00	.21	.34	.00	1168.19	544.75	100.00	6122.93
	102.950	278.74	4160.00	.00	.00	.13	.37	.00	1238.50	574.20	100.00	6656.81
	102.950	279.18	5104.00	.00	.00	.45	.56	.00	2004.63	1027.54	100.00	8075.55
	102.950	279.57	6170.00	.00	.00	.39	.68	.00	2432.96	1167.77	100.00	11039.54
	102.960	275.62	852.00	279.40	274.40	.00	.02	.00	458.23	65.69	70.00	968.99
	102.960	277.68	1687.00	279.40	274.40	2.05	.20	.00	670.93	120.00	70.00	2702.57
	102.960	278.41	2419.00	279.40	274.40	.73	.48	.00	1060.72	496.36	70.00	3830.08
	102.960	278.88	2874.00	279.40	274.40	.47	.72	.00	1321.94	607.30	70.00	4522.79
	102.960	279.15	3366.00	279.40	274.40	.28	.75	.00	1498.03	671.83	70.00	5331.78
	102.960	279.43	3849.00	279.40	274.40	.27	.81	.00	1689.33	735.55	70.00	6125.23
	102.960	279.58	4160.00	279.40	274.40	.16	.85	.00	1808.42	772.56	70.00	6659.26
*	102.960	280.09	5104.00	279.40	274.40	.51	.91	.00	3082.21	1334.29	70.00	8079.64
*	102.960	280.41	6170.00	279.40	274.40	.32	.84	.00	3518.52	1384.05	70.00	11044.32

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	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
*	102.970	275.69	852.00	.00	.00	.00	.07	.00	1105.10	133.83	100.00	970.78
*	102.970	277.80	1687.00	.00	.00	2.11	.13	.00	1437.83	205.41	100.00	2705.04
*	102.970	278.56	2419.00	.00	.00	.76	.16	.00	1690.50	500.19	100.00	3833.80

*	102.970	279.04	2874.00	.00	.00	.48	.16	.00	1984.93	730.19	100.00	4527.64
*	102.970	279.34	3366.00	.00	.00	.30	.19	.00	2223.42	873.14	100.00	5337.50
*	102.970	279.63	3849.00	.00	.00	.29	.20	.00	2494.10	1011.20	100.00	6131.93
*	102.970	279.80	4160.00	.00	.00	.17	.21	.00	2670.09	1091.64	100.00	6666.59
*	102.970	280.21	5104.00	.00	.00	.42	.12	.00	3158.10	1223.74	100.00	8090.88
*	102.970	280.53	6170.00	.00	.00	.32	.12	.00	3561.98	1275.45	100.00	11057.39
	102.980	275.70	852.00	.00	.00	.00	.00	.00	1105.24	133.84	50.00	972.05
	102.980	277.81	1687.00	.00	.00	2.11	.01	.00	1394.01	140.00	50.00	2706.67
	102.980	278.57	2419.00	.00	.00	.77	.01	.00	1584.25	329.84	50.00	3835.68
	102.980	279.05	2874.00	.00	.00	.48	.01	.00	1767.38	434.07	50.00	4529.80
	102.980	279.35	3366.00	.00	.00	.30	.01	.00	1906.83	499.05	50.00	5339.87
	102.980	279.64	3849.00	.00	.00	.29	.02	.00	2510.08	1018.77	50.00	6134.80
	102.980	279.81	4160.00	.00	.00	.17	.02	.00	2688.85	1099.87	50.00	6669.66
	102.980	280.23	5104.00	.00	.00	.42	.02	.00	3184.20	1227.15	50.00	8094.52
	102.980	280.56	6170.00	.00	.00	.33	.03	.00	3609.70	1281.43	50.00	11061.51
	102.990	275.88	852.00	278.50	274.10	.00	.19	.00	1130.81	134.74	134.00	975.49
	102.990	278.55	1687.00	278.50	274.10	2.66	.74	.00	1579.25	326.53	134.00	2711.24
	102.990	279.57	2419.00	278.50	274.10	1.02	.99	.00	2019.02	545.73	134.00	3841.22
	102.990	279.96	2874.00	278.50	274.10	.39	.91	.00	2250.09	631.10	134.00	4535.98
	102.990	280.24	3366.00	278.50	274.10	.28	.89	.00	2435.44	666.83	134.00	5346.55
	102.990	280.51	3849.00	278.50	274.10	.27	.87	.00	3536.91	1272.30	134.00	6144.10
	102.990	280.67	4160.00	278.50	274.10	.15	.85	.00	3732.43	1296.66	134.00	6679.54
	102.990	281.07	5104.00	278.50	274.10	.41	.84	.00	4270.99	1361.49	134.00	8105.98
	102.990	281.42	6170.00	278.50	274.10	.35	.86	.00	4754.29	1417.15	134.00	11074.37
*	103.000	275.89	852.00	.00	.00	.00	.00	.00	674.61	104.65	100.00	977.56
*	103.000	278.55	1687.00	.00	.00	2.66	.00	.00	1067.10	251.45	100.00	2714.28
*	103.000	279.57	2419.00	.00	.00	1.02	.00	.00	1399.36	402.30	100.00	3845.14
*	103.000	279.96	2874.00	.00	.00	.39	.00	.00	1569.68	460.87	100.00	4540.36
*	103.000	280.25	3366.00	.00	.00	.29	.00	.00	1715.19	601.19	100.00	5351.32
*	103.000	280.51	3849.00	.00	.00	.26	-.01	.00	1891.21	745.15	100.00	6150.33
*	103.000	280.66	4160.00	.00	.00	.15	-.01	.00	2010.00	828.28	100.00	6686.13
*	103.000	281.06	5104.00	.00	.00	.40	-.01	.00	2388.04	1049.91	100.00	8113.63
*	103.000	281.41	6170.00	.00	.00	.35	-.01	.00	2776.66	1161.42	100.00	11083.01
	103.010	275.91	852.00	.00	.00	.00	.02	.00	673.89	96.56	100.00	979.11
	103.010	278.58	1687.00	.00	.00	2.67	.03	.00	941.49	102.00	100.00	2716.58
	103.010	279.60	2419.00	.00	.00	1.02	.03	.00	1046.08	102.00	100.00	3847.95
	103.010	280.01	2874.00	.00	.00	.41	.04	.00	1582.69	465.04	100.00	4543.98
	103.010	280.30	3366.00	.00	.00	.30	.05	.00	1742.75	625.92	100.00	5355.28
	103.010	280.57	3849.00	.00	.00	.27	.06	.00	1939.83	780.24	100.00	6154.73
	103.010	280.73	4160.00	.00	.00	.16	.07	.00	2069.18	866.72	100.00	6690.81
	103.010	281.15	5104.00	.00	.00	.42	.09	.00	2482.31	1098.23	100.00	8119.22
	103.010	281.52	6170.00	.00	.00	.37	.11	.00	2905.18	1180.08	100.00	11089.54

	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	103.020	276.18	852.00	281.90	275.40	.00	.27	.00	701.27	97.46	132.00	981.19
	103.020	279.70	1687.00	281.90	275.40	3.52	1.13	.00	1057.34	102.00	132.00	2719.61
*	103.020	281.91	2419.00	281.90	275.40	2.20	2.31	.00	2102.87	762.78	132.00	3852.72
*	103.020	282.25	2874.00	281.90	275.40	.34	2.24	.00	3811.11	1304.07	132.00	4552.15
*	103.020	282.43	3366.00	281.90	275.40	.18	2.13	.00	4050.70	1334.94	132.00	5364.06
*	103.020	282.58	3849.00	281.90	275.40	.15	2.01	.00	4254.63	1360.66	132.00	6164.11
*	103.020	282.67	4160.00	281.90	275.40	.09	1.94	.00	4373.24	1375.40	132.00	6700.57
*	103.020	282.90	5104.00	281.90	275.40	.23	1.75	.00	4697.59	1414.92	132.00	8130.09
*	103.020	283.10	6170.00	281.90	275.40	.20	1.58	.00	4988.90	1449.50	132.00	11101.50
*	103.030	276.16	852.00	.00	.00	.00	-.02	.00	285.30	48.63	100.00	982.32
*	103.030	279.73	1687.00	.00	.00	3.56	.02	.00	1656.69	1029.79	100.00	2722.73
	103.030	281.96	2419.00	.00	.00	2.24	.06	.00	4455.14	1416.84	100.00	3860.25
	103.030	282.28	2874.00	.00	.00	.32	.03	.00	4902.49	1461.91	100.00	4562.15
	103.030	282.47	3366.00	.00	.00	.19	.04	.00	5178.92	1489.07	100.00	5374.66
	103.030	282.63	3849.00	.00	.00	.16	.05	.00	5413.91	1511.78	100.00	6175.21
	103.030	282.72	4160.00	.00	.00	.09	.05	.00	5558.97	1525.63	100.00	6711.97
	103.030	282.97	5104.00	.00	.00	.25	.07	.00	5938.48	1561.28	100.00	8142.30
	103.030	283.19	6170.00	.00	.00	.22	.09	.00	6306.98	1595.14	100.00	11114.46
*	103.040	276.50	640.00	.00	.00	.00	.33	.00	186.46	33.26	200.00	983.41
*	103.040	279.87	1165.00	.00	.00	3.37	.15	.00	852.80	620.20	200.00	2731.33
*	103.040	282.01	1531.00	.00	.00	2.14	.04	.00	2562.99	962.58	200.00	3886.47
*	103.040	282.33	1742.00	.00	.00	.32	.05	.00	2876.41	1052.78	200.00	4591.34
*	103.040	282.53	1985.00	.00	.00	.20	.06	.00	3090.34	1110.14	200.00	5405.78
*	103.040	282.69	2198.00	.00	.00	.17	.06	.00	3281.07	1158.90	200.00	6208.01
*	103.040	282.79	2378.00	.00	.00	.10	.07	.00	3395.92	1187.29	200.00	6745.80
*	103.040	283.06	2857.00	.00	.00	.27	.09	.00	3724.38	1264.97	200.00	8178.95
*	103.040	283.30	2776.00	.00	.00	.25	.11	.00	4046.01	1336.68	200.00	11153.86
*	103.190	278.73	640.00	.00	.00	.00	2.23	.00	146.76	34.58	792.00	986.44
	103.190	280.62	1165.00	.00	.00	1.89	.75	.00	1245.13	986.59	792.00	2746.29
	103.190	282.15	1531.00	.00	.00	1.53	.14	.00	2906.42	1143.86	792.00	3925.62
	103.190	282.46	1742.00	.00	.00	.31	.13	.00	3267.65	1160.08	792.00	4635.23
	103.190	282.67	1985.00	.00	.00	.21	.14	.00	3510.68	1170.87	792.00	5452.89
	103.190	282.85	2198.00	.00	.00	.18	.15	.00	3706.89	1179.50	792.00	6257.88
	103.190	282.96	2378.00	.00	.00	.11	.16	.00	3836.17	1185.16	792.00	6797.41
	103.190	283.25	2857.00	.00	.00	.29	.19	.00	4188.50	1200.44	792.00	8235.43
	103.190	283.45	2776.00	.00	.00	.20	.15	.00	4440.68	1211.25	792.00	11214.53
	103.230	279.59	640.00	.00	.00	.00	.86	.00	155.46	32.93	211.00	987.17
*	103.230	280.80	1165.00	.00	.00	1.20	.18	.00	196.14	34.00	211.00	2749.78
*	103.230	282.21	1531.00	.00	.00	1.41	.06	.00	1708.68	949.10	211.00	3936.79
*	103.230	282.52	1742.00	.00	.00	.31	.06	.00	2007.87	971.92	211.00	4648.00
*	103.230	282.73	1985.00	.00	.00	.21	.06	.00	2215.96	987.48	211.00	5466.76
*	103.230	282.91	2198.00	.00	.00	.18	.07	.00	2394.19	1000.61	211.00	6272.66
*	103.230	283.03	2378.00	.00	.00	.11	.07	.00	2518.08	1009.64	211.00	6812.80
*	103.230	283.33	2857.00	.00	.00	.30	.08	.00	2825.20	1031.69	211.00	8252.42
*	103.230	283.52	2776.00	.00	.00	.19	.07	.00	3011.12	1044.80	211.00	11232.57

	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	103.240	279.70	640.00	284.70	277.80	.00	.11	.00	159.21	33.17	180.00	987.82
	103.240	281.58	1165.00	284.70	277.80	1.87	.78	.00	222.74	34.00	180.00	2750.65
*	103.240	283.89	1531.00	284.70	277.80	2.31	1.68	.00	301.32	34.00	180.00	3940.95
*	103.240	284.87	1742.00	284.70	277.80	.98	2.35	.00	4501.56	1131.08	180.00	4661.45
*	103.240	285.08	1985.00	284.70	277.80	.21	2.34	.00	4736.87	1143.78	180.00	5481.12
*	103.240	285.19	2198.00	284.70	277.80	.12	2.28	.00	4874.49	1151.14	180.00	6287.67
*	103.240	285.28	2378.00	284.70	277.80	.09	2.26	.00	4976.68	1156.57	180.00	6828.29
*	103.240	285.49	2857.00	284.70	277.80	.20	2.16	.00	5210.77	1170.39	180.00	8269.02
*	103.240	285.48	2776.00	284.70	277.80	.00	1.97	.00	5205.77	1170.10	180.00	11249.55
*	103.400	281.79	640.00	.00	.00	.00	2.09	.00	255.92	66.45	898.00	992.10
*	103.400	283.67	1165.00	.00	.00	1.87	2.09	.00	504.71	201.04	898.00	2758.04
*	103.400	285.27	1531.00	.00	.00	1.61	1.38	.00	961.52	381.18	898.00	3953.55
*	103.400	285.01	1742.00	.00	.00	-.26	.14	.00	864.16	348.49	898.00	4710.63
*	103.400	285.23	1985.00	.00	.00	.22	.16	.00	945.02	375.84	898.00	5533.22
*	103.400	285.37	2198.00	.00	.00	.14	.18	.00	998.62	392.92	898.00	6341.53
*	103.400	285.48	2378.00	.00	.00	.11	.19	.00	1040.99	405.92	898.00	6883.47
*	103.400	285.73	2857.00	.00	.00	.26	.25	.00	1149.02	437.30	898.00	8327.37
*	103.400	285.72	2776.00	.00	.00	-.02	.23	.00	1141.40	435.17	898.00	11307.78
*	103.690	285.53	640.00	.00	.00	.00	3.74	.00	155.79	49.31	1531.00	999.33
*	103.690	286.95	1165.00	.00	.00	1.42	3.28	.00	234.63	62.55	1531.00	2770.91
*	103.690	287.36	1531.00	.00	.00	.42	2.09	.00	261.75	66.74	1531.00	3974.59
*	103.690	287.97	1742.00	.00	.00	.60	2.96	.00	303.52	72.72	1531.00	4730.77
*	103.690	288.39	1985.00	.00	.00	.43	3.16	.00	434.12	578.74	1531.00	5556.80
*	103.690	288.69	2198.00	.00	.00	.29	3.32	.00	663.60	848.92	1531.00	6369.77
*	103.690	288.89	2378.00	.00	.00	.20	3.41	.00	846.89	993.04	1531.00	6915.47
*	103.690	289.29	2857.00	.00	.00	.41	3.56	.00	1304.86	1179.49	1531.00	8368.92
*	103.690	289.23	2776.00	.00	.00	-.06	3.52	.00	1224.91	1174.22	1531.00	11347.84
	103.700	285.53	640.00	288.00	287.30	.00	.00	.00	155.80	49.31	35.00	999.46
	103.700	287.62	1165.00	288.00	287.30	2.09	.67	.00	279.10	69.28	35.00	2771.12
	103.700	288.08	1531.00	288.00	287.30	.46	.71	.00	312.02	73.87	35.00	3974.82
	103.700	288.38	1742.00	288.00	287.30	.30	.41	.00	431.85	574.63	35.00	4731.07
	103.700	288.63	1985.00	288.00	287.30	.25	.23	.00	620.21	834.66	35.00	5557.22
	103.700	288.80	2198.00	288.00	287.30	.17	.11	.00	770.00	933.24	35.00	6370.35
	103.700	288.92	2378.00	288.00	287.30	.12	.03	.00	884.38	1020.93	35.00	6916.17
	103.700	289.30	2857.00	288.00	287.30	.38	.01	.00	1322.47	1180.64	35.00	8369.97
	103.700	289.25	2776.00	288.00	287.30	-.05	.02	.00	1266.75	1176.98	35.00	11348.84
*	103.850	288.06	640.00	.00	.00	.00	2.53	.00	220.11	59.73	845.00	1003.10
*	103.850	289.79	1165.00	.00	.00	1.73	2.17	.00	441.95	351.40	845.00	2777.08
*	103.850	290.41	1531.00	.00	.00	.62	2.33	.00	700.67	458.51	845.00	3981.59
*	103.850	290.69	1742.00	.00	.00	.27	2.31	.00	831.21	505.14	845.00	4739.60
*	103.850	290.91	1985.00	.00	.00	.22	2.28	.00	949.92	565.54	845.00	5567.89
*	103.850	291.06	2198.00	.00	.00	.15	2.26	.00	1041.41	641.12	845.00	6382.65
*	103.850	291.18	2378.00	.00	.00	.11	2.26	.00	1115.89	663.98	845.00	6929.70
	103.850	291.36	2857.00	.00	.00	.18	2.06	.00	1237.60	674.60	845.00	8386.98
	103.850	291.33	2776.00	.00	.00	-.03	2.08	.00	1214.19	672.57	845.00	11365.38

	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	103.860	288.35	640.00	289.10	287.40	.00	.30	.00	238.68	61.97	35.00	1003.29
	103.860	290.03	1165.00	289.10	287.40	1.68	.24	.00	535.48	404.88	35.00	2777.47
	103.860	290.42	1531.00	289.10	287.40	.39	.00	.00	701.31	458.75	35.00	3982.16
	103.860	290.69	1742.00	289.10	287.40	.27	.00	.00	830.25	504.81	35.00	4740.27
	103.860	290.91	1985.00	289.10	287.40	.22	.00	.00	949.07	564.80	35.00	5568.65
	103.860	291.06	2198.00	289.10	287.40	.15	.00	.00	1041.37	641.08	35.00	6383.49
	103.860	291.18	2378.00	289.10	287.40	.11	.00	.00	1116.17	664.01	35.00	6930.60
	103.860	291.36	2857.00	289.10	287.40	.18	.00	.00	1240.05	674.81	35.00	8387.98
	103.860	291.33	2776.00	289.10	287.40	-.03	.00	.00	1217.49	672.86	35.00	11366.36
*	103.920	288.87	377.00	.00	.00	.00	.51	.00	179.63	52.79	370.00	1005.07
*	103.920	290.54	718.00	.00	.00	1.68	.51	.00	277.01	63.43	370.00	2781.05
*	103.920	291.01	950.00	.00	.00	.47	.59	.00	371.77	297.72	370.00	3986.98
*	103.920	291.27	1102.00	.00	.00	.26	.59	.00	465.65	424.65	370.00	4746.15
*	103.920	291.52	1301.00	.00	.00	.25	.61	.00	584.40	544.34	370.00	5575.66
*	103.920	291.71	1477.00	.00	.00	.19	.64	.00	694.04	635.13	370.00	6391.45
*	103.920	291.85	1627.00	.00	.00	.14	.67	.00	790.06	705.10	370.00	6939.36
	103.920	292.16	1984.00	.00	.00	.32	.80	.00	1033.17	791.10	370.00	8398.46
	103.920	292.11	1897.00	.00	.00	-.05	.78	.00	990.68	787.47	370.00	11376.54
*	104.000	289.64	377.00	.00	.00	.00	.77	.00	89.48	37.12	422.00	1006.37
*	104.000	291.29	718.00	.00	.00	1.65	.74	.00	158.63	46.81	422.00	2783.16
*	104.000	291.89	950.00	.00	.00	.61	.88	.00	188.18	50.38	422.00	3989.67
*	104.000	292.19	1102.00	.00	.00	.29	.91	.00	233.59	226.09	422.00	4749.49
*	104.000	292.49	1301.00	.00	.00	.30	.97	.00	309.42	280.70	422.00	5579.90
*	104.000	292.71	1477.00	.00	.00	.23	1.01	.00	377.96	322.19	422.00	6396.52
*	104.000	292.88	1627.00	.00	.00	.17	1.03	.00	435.01	353.03	422.00	6945.14
*	104.000	293.21	1984.00	.00	.00	.33	1.05	.00	561.55	413.30	422.00	8405.94
*	104.000	293.14	1897.00	.00	.00	-.07	1.03	.00	531.53	399.83	422.00	11383.69
	104.130	293.98	377.00	.00	.00	.00	4.34	.00	73.79	21.40	686.00	1007.65
	104.130	295.33	718.00	.00	.00	1.35	4.05	.00	103.90	23.32	686.00	2785.22
	104.130	296.02	950.00	.00	.00	.69	4.12	.00	197.61	156.40	686.00	3992.59
	104.130	296.34	1102.00	.00	.00	.32	4.15	.00	257.45	219.48	686.00	4753.14
	104.130	296.65	1301.00	.00	.00	.31	4.16	.00	335.11	280.96	686.00	5584.60
	104.130	296.87	1477.00	.00	.00	.22	4.15	.00	400.48	325.62	686.00	6402.13
	104.130	297.03	1627.00	.00	.00	.16	4.14	.00	456.60	370.28	686.00	6951.52
	104.130	297.36	1984.00	.00	.00	.34	4.15	.00	596.81	456.23	686.00	8414.15
	104.130	297.29	1897.00	.00	.00	-.08	4.15	.00	562.53	442.47	686.00	11391.45
	104.140	294.12	377.00	296.50	294.00	.00	.15	.00	77.03	21.61	33.00	1007.71
*	104.140	296.66	718.00	296.50	294.00	2.53	1.33	.00	306.36	208.55	33.00	2785.38
*	104.140	297.15	950.00	296.50	294.00	.50	1.13	.00	507.40	406.50	33.00	3992.86
*	104.140	297.33	1102.00	296.50	294.00	.18	1.00	.00	585.66	452.29	33.00	4753.46
*	104.140	297.50	1301.00	296.50	294.00	.17	.85	.00	665.85	479.87	33.00	5584.98

*	104.140	297.63	1477.00	296.50	294.00	.12	.76	.00	727.84	500.14	33.00	6402.56
*	104.140	297.71	1627.00	296.50	294.00	.08	.68	.00	762.89	511.25	33.00	6951.99
	104.140	297.86	1984.00	296.50	294.00	.16	.50	.00	844.82	536.32	33.00	8414.69
	104.140	297.83	1897.00	296.50	294.00	-.03	.54	.00	827.25	531.04	33.00	11391.98

	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	104.210	297.14	377.00	.00	.00	.00	3.01	.00	180.06	301.05	422.00	1008.93
	104.210	298.04	718.00	.00	.00	.91	1.39	.00	536.95	465.76	422.00	2789.30
	104.210	298.41	950.00	.00	.00	.36	1.25	.00	713.26	504.65	422.00	3998.52
	104.210	298.61	1102.00	.00	.00	.21	1.28	.00	818.50	515.49	422.00	4759.97
	104.210	298.85	1301.00	.00	.00	.24	1.35	.00	942.62	527.99	422.00	5592.43
	104.210	299.04	1477.00	.00	.00	.19	1.41	.00	1043.37	537.92	422.00	6410.76
	104.210	299.20	1627.00	.00	.00	.16	1.49	.00	1128.37	546.16	422.00	6960.73
	104.210	299.52	1984.00	.00	.00	.33	1.66	.00	1310.33	563.39	422.00	8424.66
	104.210	299.45	1897.00	.00	.00	-.08	1.62	.00	1267.33	559.37	422.00	11401.66
*	104.220	297.16	377.00	296.40	296.40	.00	.02	.00	189.58	310.80	34.00	1009.07
	104.220	298.04	718.00	296.40	296.40	.88	.00	.00	536.84	465.72	34.00	2789.72
	104.220	298.41	950.00	296.40	296.40	.36	.00	.00	713.11	504.63	34.00	3999.08
	104.220	298.61	1102.00	296.40	296.40	.21	.00	.00	818.16	515.45	34.00	4760.61
	104.220	298.85	1301.00	296.40	296.40	.24	.00	.00	947.90	528.51	34.00	5593.17
	104.220	299.04	1477.00	296.40	296.40	.19	.00	.00	1048.65	538.43	34.00	6411.57
	104.220	299.20	1627.00	296.40	296.40	.16	.00	.00	1133.55	546.66	34.00	6961.62
	104.220	299.52	1984.00	296.40	296.40	.33	.00	.00	1315.79	563.90	34.00	8425.68
	104.220	299.45	1897.00	296.40	296.40	-.08	.00	.00	1272.71	559.87	34.00	11402.65
*	104.270	299.00	377.00	.00	.00	.00	1.84	.00	284.93	255.77	343.00	1010.84
	104.270	299.43	718.00	.00	.00	.43	1.39	.00	400.80	283.49	343.00	2793.20
	104.270	299.71	950.00	.00	.00	.28	1.31	.00	482.63	301.53	343.00	4003.52
*	104.270	299.88	1102.00	.00	.00	.16	1.27	.00	532.83	312.09	343.00	4765.62
*	104.270	300.07	1301.00	.00	.00	.19	1.22	.00	595.16	326.56	343.00	5598.89
*	104.270	300.24	1477.00	.00	.00	.17	1.20	.00	650.83	341.56	343.00	6417.88
*	104.270	300.38	1627.00	.00	.00	.14	1.18	.00	697.91	353.74	343.00	6968.41
*	104.270	300.68	1984.00	.00	.00	.30	1.15	.00	809.31	381.03	343.00	8433.57
*	104.270	300.61	1897.00	.00	.00	-.07	1.16	.00	782.33	374.61	343.00	11410.28
	104.340	300.43	377.00	.00	.00	.00	1.42	.00	210.05	303.31	343.00	1012.58
	104.340	301.09	718.00	.00	.00	.66	1.65	.00	430.15	371.22	343.00	2796.14
	104.340	301.40	950.00	.00	.00	.32	1.69	.00	553.23	404.25	343.00	4007.17
	104.340	301.58	1102.00	.00	.00	.18	1.70	.00	630.91	423.78	343.00	4769.73
	104.340	301.80	1301.00	.00	.00	.22	1.73	.00	723.68	446.03	343.00	5603.55
	104.340	301.97	1477.00	.00	.00	.17	1.73	.00	800.75	466.74	343.00	6423.01
	104.340	302.10	1627.00	.00	.00	.14	1.73	.00	864.88	483.29	343.00	6973.94
	104.340	302.40	1984.00	.00	.00	.30	1.72	.00	1010.61	507.23	343.00	8440.01
	104.340	302.33	1897.00	.00	.00	-.07	1.72	.00	976.23	503.96	343.00	11416.51
	104.350	300.42	377.00	299.70	298.40	.00	-.01	.00	207.87	302.56	34.00	1012.75
	104.350	301.09	718.00	299.70	298.40	.67	.00	.00	431.07	371.48	34.00	2796.47
	104.350	301.40	950.00	299.70	298.40	.32	.00	.00	553.60	404.35	34.00	4007.61
	104.350	301.58	1102.00	299.70	298.40	.18	.00	.00	626.34	422.65	34.00	4770.22
	104.350	301.80	1301.00	299.70	298.40	.22	.00	.00	720.85	445.32	34.00	5604.12
	104.350	301.97	1477.00	299.70	298.40	.17	.00	.00	798.66	466.19	34.00	6423.64
	104.350	302.10	1627.00	299.70	298.40	.14	.00	.00	863.35	482.91	34.00	6974.62
	104.350	302.40	1984.00	299.70	298.40	.30	.00	.00	1010.39	507.21	34.00	8440.80
	104.350	302.33	1897.00	299.70	298.40	-.07	.00	.00	975.89	503.93	34.00	11417.27

SUMMARY OF ERRORS AND SPECIAL NOTES

CAUTION SECNO= 17.503 PROFILE= 5 HYDRAULIC JUMP D.S.
CAUTION SECNO= 17.503 PROFILE= 6 HYDRAULIC JUMP D.S.
CAUTION SECNO= 17.503 PROFILE= 7 HYDRAULIC JUMP D.S.

WARNING SECNO= 18.481 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO= 18.563 PROFILE= 5 HYDRAULIC JUMP D.S.
CAUTION SECNO= 18.563 PROFILE= 6 HYDRAULIC JUMP D.S.
CAUTION SECNO= 18.563 PROFILE= 7 HYDRAULIC JUMP D.S.

CAUTION SECNO= 19.563 PROFILE= 4 HYDRAULIC JUMP D.S.
CAUTION SECNO= 19.563 PROFILE= 5 HYDRAULIC JUMP D.S.
CAUTION SECNO= 19.563 PROFILE= 6 HYDRAULIC JUMP D.S.
CAUTION SECNO= 19.563 PROFILE= 7 HYDRAULIC JUMP D.S.

WARNING SECNO= 20.021 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 20.021 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 20.021 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 20.021 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 20.021 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 20.021 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 20.021 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 20.021 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 20.021 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 20.102 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 20.102 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 20.102 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO= 20.103 PROFILE= 5 HYDRAULIC JUMP D.S.
CAUTION SECNO= 20.103 PROFILE= 6 HYDRAULIC JUMP D.S.
CAUTION SECNO= 20.103 PROFILE= 7 HYDRAULIC JUMP D.S.

WARNING SECNO= 21.059 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
CAUTION SECNO= 21.059 PROFILE= 2 CRITICAL DEPTH ASSUMED

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 CAUTION SECNO=     21.059  PROFILE=  2  MINIMUM SPECIFIC ENERGY
 WARNING SECNO=     21.059  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     21.059  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     21.059  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     21.059  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     21.059  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     21.059  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     21.059  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=     21.501  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     21.501  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     21.501  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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 WARNING SECNO=     21.501  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     21.501  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     21.501  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     21.501  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 CAUTION SECNO=     21.583  PROFILE=  8  HYDRAULIC JUMP D.S.
 CAUTION SECNO=     21.583  PROFILE=  9  HYDRAULIC JUMP D.S.

 WARNING SECNO=     22.009  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     22.009  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     22.009  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     22.009  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     22.009  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=     22.450  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     22.450  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     22.450  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=     22.450  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 CAUTION SECNO=     22.603  PROFILE=  9  HYDRAULIC JUMP D.S.

 WARNING SECNO=    100.190  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    100.190  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    100.190  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    100.190  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    100.190  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    100.640  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    100.750  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    100.750  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    100.750  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    101.080  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    101.080  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    101.080  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 CAUTION SECNO=    101.080  PROFILE=  4  WSEL ASSUMED BASED ON MIN DIFF
 CAUTION SECNO=    101.080  PROFILE=  4  20 TRIALS ATTEMPTED TO BALANCE WSEL
 WARNING SECNO=    101.080  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    101.080  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    101.080  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    101.080  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    101.080  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 CAUTION SECNO=    101.090  PROFILE=  3  20 TRIALS OF EG NOT ENOUGH
 WARNING SECNO=    101.090  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    101.090  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    101.090  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    101.090  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    101.220  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
1
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 WARNING SECNO=    101.220  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    101.780  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    101.780  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 CAUTION SECNO=    101.790  PROFILE=  4  HYDRAULIC JUMP D.S.
 CAUTION SECNO=    101.790  PROFILE=  5  HYDRAULIC JUMP D.S.
 CAUTION SECNO=    101.790  PROFILE=  6  HYDRAULIC JUMP D.S.
 CAUTION SECNO=    101.790  PROFILE=  7  HYDRAULIC JUMP D.S.
 CAUTION SECNO=    101.790  PROFILE=  8  HYDRAULIC JUMP D.S.

 WARNING SECNO=    102.320  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    102.930  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    102.930  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    102.930  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    102.930  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    102.930  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    102.960  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    102.960  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    102.970  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    102.970  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    102.970  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    102.970  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    102.970  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    102.970  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    102.970  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    102.970  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    102.970  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

 WARNING SECNO=    103.000  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
 WARNING SECNO=    103.000  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
```

WARNING SECNO= 103.000 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.000 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 103.020 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.020 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.020 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.020 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.020 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.020 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.020 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 103.030 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

1

WARNING SECNO= 103.030 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 103.040 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.040 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.040 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.040 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.040 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.040 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.040 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.040 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.040 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 103.190 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 103.230 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.230 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.230 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.230 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.230 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.230 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.230 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.230 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 103.240 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.240 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.240 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.240 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.240 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.240 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.240 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 103.400 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.400 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.400 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.400 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.400 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.400 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.400 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.400 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.400 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 103.690 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.690 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.690 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.690 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.690 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.690 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.690 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.690 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.690 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 103.850 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

1

WARNING SECNO= 103.850 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.850 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.850 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.850 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.850 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.850 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 103.920 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.920 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.920 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.920 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.920 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.920 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 103.920 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 104.000 PROFILE= 1 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 104.000 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 104.000 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 104.000 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 104.000 PROFILE= 5 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 104.000 PROFILE= 6 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 104.000 PROFILE= 7 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 104.000 PROFILE= 8 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 104.000 PROFILE= 9 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO= 104.140 PROFILE= 2 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 104.140 PROFILE= 3 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO= 104.140 PROFILE= 4 CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

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WARNING SECNO=    104.140  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    104.140  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    104.140  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=    104.220  PROFILE=  1  HYDRAULIC JUMP D.S.

WARNING SECNO=    104.270  PROFILE=  1  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    104.270  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    104.270  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    104.270  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    104.270  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    104.270  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    104.270  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
```

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1**********************************************
 *  HEC-2 WATER SURFACE PROFILES              *
 *                                            *
 *  Version    4.6.2;  May 1991               *
 *                                            *
 *  RUN DATE    05FEB13    TIME   20:14:22    *
 **********************************************
```

Higginbottom Creek + Viney Slough Ditch Existing Conditions (Study Region)

```
****************************************
*  U.S. ARMY CORPS OF ENGINEERS        *
*  HYDROLOGIC ENGINEERING CENTER       *
*  609 SECOND STREET, SUITE D          *
*  DAVIS, CALIFORNIA 95616-4687        *
*       (916) 756-1104                 *
****************************************
```

```
X     X  XXXXXXX   XXXXX              XXXXX
X     X  X        X     X            X     X
X     X  X        X                        X
XXXXXXX  XXXX     X          XXXXX    XXXXX
X     X  X        X                  X
X     X  X        X     X            X
X     X  XXXXXXX   XXXXX             XXXXXXX
```


THIS RUN EXECUTED 05FEB13 20:14:22

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************************************
 HEC-2 WATER SURFACE PROFILES

 Version    4.6.2;  May 1991
************************************
```

T1 WHITEMAN'S CREEK FEASIBILITY STUDY
T2 VINEY SLOUGH DITCH
T3 EXISTING CONDITIONS, APR 1991 RSS

J1	ICHECK	INQ	NINV	IDIR	STRT	METRIC	HVINS	Q	WSEL	FQ
	0	2	0	0	0	0	0	0	237.40	

J2	NPROF	IPLOT	PREVS	XSECV	XSECH	FN	ALLDC	IBW	CHNIM	ITRACE
	1	0	-1							

J3 VARIABLE CODES FOR SUMMARY PRINTOUT

38	1	2	43	13	14	15	47	46	55
26	56	42		38	1	43	40	41	50
51	52	25	4	39	7				

NC	.09	.09	.05	.1	.3					
QT	9	945	1980	2784	3344	3957	4532	4907	6113	8384
X1	21.604	47	11669	11726	0	0	0	0	0.1	
X3	10			10000	237.2			237.7	237.8	
GR	237.2	8367	237.2	8368	237.2	8369	237.2	8370	237.2	8371
GR	237.2	10000	237.2	10100	237.4	10200	237.2	10400	237.3	10500
GR	237	10600	236.9	10700	237.7	10900	237.4	11000	237.2	11100
GR	237.2	11200	237.1	11300	237.3	11400	237.2	11500	237.6	11600
GR	239.5	11637	239.5	11669	235.1	11679	228.9	11687	227.3	11690
GR	226.8	11700	227.3	11708	233.5	11715	239.2	11726	239.2	11755
GR	238.2	11800	238.3	11900	237.6	12000	238.2	12100	237.8	12200
GR	238.6	12300	238.8	12400	238.3	12500	238.7	12800	238.9	12900
GR	239.1	13000	239.2	13100	239	13200	238.9	13300	240	13470
GR	245	13890	250	14670						
X1	22.009	0	0	0	2112	2112	2112	0	2.2	
X3	10			10000	237.2			237.7	237.8	
X1	22.45	29	11936	12011	2268	2368	2368			
X3				10680	244.1					
GR	242	9000	242	10680	244	11100	244.1	11200	244	11300
GR	244.4	11400	244.6	11500	244.7	11600	245	11700	245.6	11800
GR	246	11900	246.6	11936	242.7	11949	241.1	11960	231.4	11970
GR	232.2	11978	232.6	11987	240.7	11995	246.5	12011	246.4	12024

GR	246.2	12040	246	12100	245.8	12200	246.3	12300	246.9	12400
GR	246.7	12500	247.1	12600	247.5	12700	248	12800		
NC	0	0	0	.3	.5					
X1	22.602	38	11636	11711	870	350	800			
GR	248.0	9400	247.0	10000	246.8	10200	246.6	10300	246.4	10400
GR	246.2	10500	246	10600	245.6	10700	245.1	10800	244.7	10900
GR	244.5	11000	244.7	11100	244.5	11200	244	11300	245	11400
GR	245.6	11500	246	11600	246.6	11636	242.7	11649	241.1	11660
GR	232.1	11670	232.2	11678	232.6	11687	240.7	11695	246.5	11711
GR	246.4	11724	246.2	11740	246	11800	245.8	11900	246.3	12000
GR	246.9	12100	246.7	12200	247.1	12300	247.1	12500	248	12600
GR	248.5	12700	248.6	12800	248.4	12900				
SB	1.05	1.6	2.6	0	25	7.52	498.5	1.79	233.5	233.5
X1	22.603	0	0	0	15	15	15			
X2	0	0	1	246	244.1	0	0	1.33		
BT	-29	10000	245.2		10100	245.2		10200	245.6	
BT		10300	245.2		10400	245.5		10500	245.6	
BT		10600	246.1		10700	245.7		10800	245.9	
BT		10900	244.9		11000	244.6		11100	244.9	
BT		11200	245.4		11300	245.2		11500	245.9	
BT		11600	245.7		11700	247		11728	248	

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BT          11800      248          11900      245.8          12000      246.3
BT          12100      246.9        12200      246.7          12300      247.1
BT          12500      247.1        12600      248            12700      248.5
BT          12800      248.6        12900      248.4

NC      0          0          0        .1         .3
QT      9       1072       2113       2931       3476       4097       4709       5103       6378       8338
X1 22.644          0          0          0        450        120        225

NC    .09        .09       .055         .3         .5
X1 100.19         59      12363      12440       1000        850        980
GR  251.6      10000      251.5      10100      251.1      10200      250.9      10300      250.9      10400
GR  251.1      10500      250.7      10600      250.6      10700      250.1      10800      249.4      10900
GR  248.8      11000      248.9      11100      249.4      11200      249.1      11300      249.1      11400
GR  249.1      11500      248.6      11600      248.4      11700      247.9      11800      247.9      11900
GR  247.6      12000      247.5      12100      248.3      12200      247.6      12300      247.2      12363
GR  244.0      12377      242.5      12394      241.1      12400      238.8      12407      233.9      12412
GR  232.5      12417      231.9      12420      232.6      12424      233.9      12427      237.5      12430
GR  241.6      12436      246.7      12440      250.6      12447      250.4      12450      248.9      12457
GR  246.6      12461      246.9      12473      246.6      12482      247.0      12485      245.3      12487
GR  245.3      12489      248.5      12493      248.6      12500      248.4      12600      247.9      12700
GR  248.1      12800      248.0      12900      247.7      13000      247.6      13100      247.4      13200
GR  247.5      13300      247.1      13400        247      13500      248.4      14300

X1 100.64         44      11851      12008       2011       2172       2376
X3     10                                                          256      255.6
GR  256.0       9578      253.0      10100      253.0      10200      253.0      10300      253.1      10400
GR  252.9      10500      253.2      10600      252.7      10700      252.4      10800      252.1      10900
GR  252.6      11000      252.0      11100      253.4      11200      253.2      11300      252.8      11400
GR  253.0      11500      253.2      11600      253.1      11700      253.3      11800      254.4      11851
GR  249.5      11861      249.8      11877      243.4      11881      239.8      11891      239.4      11895
1
   05FEB13      20:14:22                                                                              PAGE    3


GR  239.5      11898      239.7      11900      240.1      11905      245.2      11922      246.6      11953
GR  247.5      11992      248.0      12000      251.1      12008      253.6      12100      253.7      12200
GR  253.6      12300      253.2      12400      252.4      12500      252.0      12600      251.8      12700
GR  251.8      12800      251.6      12900      251.7      13000      255.0      14228

SB    .9        1.5        2.5          0      28.33       6.12      908.4       3.62      240.5      240.5
X1 100.64          0          0          0         10         10         10
X2     0           0          1      253.5      255.5
X3    10                                                          256      255.6
BT    10       9578      256.0          0      11000      256.0          0      11600      255.6          0
BT 11930      255.5          0      12000      255.6          0      12400      255.7          0      12600
BT 255.6          0      12700      255.6          0      12800      255.5          0      14228      255.0
BT     0
1

1
   05FEB13      20:14:22                                                                              PAGE   40


                                                                                THIS RUN EXECUTED 05FEB13    20:14:22

 ************************************
  HEC-2 WATER SURFACE PROFILES

  Version   4.6.2;  May 1991
 ************************************

 NOTE- ASTERISK (*) AT LEFT OF CROSS-SECTION NUMBER INDICATES MESSAGE IN SUMMARY OF ERRORS LIST


   EXISTING CONDITIONS, A

 SUMMARY PRINTOUT

       SECNO     CWSEL     CRIWS         Q        QLOB        QCH        QROB       QPR      QWEIR      VLOB       VCH      VROB      ELMIN

       21.604    237.40       .00    945.00         .00     945.00         .00       .00        .00       .00      2.93       .00     226.90
       21.604    238.22       .00   1980.00     1081.71     889.16        9.13       .00        .00       .37      2.45       .15     226.90
       21.604    238.53       .00   2784.00     1790.67     949.73       43.61       .00        .00       .46      2.50       .22     226.90
       21.604    238.70       .00   3344.00     2266.93     994.99       82.08       .00        .00       .51      2.56       .26     226.90
       21.604    238.88       .00   3957.00     2785.98    1028.51      142.51       .00        .00       .55      2.58       .29     226.90
       21.604    239.03       .00   4532.00     3259.55    1059.70      212.75       .00        .00       .59      2.61       .33     226.90
       21.604    239.12       .00   4907.00     3563.09    1080.02      263.89       .00        .00       .61      2.62       .35     226.90
       21.604    239.35       .00   6113.00     4507.47    1164.14      441.39       .00        .00       .69      2.74       .40     226.90
       21.604    239.79       .00   8384.00     6219.59    1263.74      900.68       .00        .00       .78      2.81       .49     226.90

       22.009    239.40       .00    945.00        2.72     942.28         .00       .00        .00       .13      3.02       .00     229.10
 *     22.009    240.03       .00   1980.00      667.28    1312.44         .27       .00        .00       .41      3.82       .10     229.10
 *     22.009    240.34       .00   2784.00     1427.31    1348.26        8.43       .00        .00       .54      3.75       .21     229.10
 *     22.009    240.53       .00   3344.00     1951.08    1368.87       24.05       .00        .00       .61      3.71       .26     229.10
 *     22.009    240.70       .00   3957.00     2510.26    1391.46       55.27       .00        .00       .66      3.68       .32     229.10
       22.009    240.84       .00   4532.00     3023.62    1411.66       96.73       .00        .00       .71      3.66       .36     229.10
       22.009    240.93       .00   4907.00     3352.73    1424.62      129.65       .00        .00       .74      3.65       .38     229.10
       22.009    241.20       .00   6113.00     4382.34    1455.87      274.79       .00        .00       .81      3.59       .44     229.10
       22.009    241.60       .00   8384.00     6194.44    1544.16      645.40       .00        .00       .92      3.61       .54     229.10

       22.450    242.15       .00    945.00         .29     944.71         .00       .00        .00       .11      3.37       .00     231.40
       22.450    244.06       .00   1980.00      345.78    1634.22         .00       .00        .00       .77      4.27       .00     231.40
       22.450    244.45       .00   2784.00      885.82    1898.18         .00       .00        .00       .69      4.68       .00     231.40
       22.450    244.62       .00   3344.00     1329.68    2014.32         .00       .00        .00       .77      4.83       .00     231.40
       22.450    244.78       .00   3957.00     1830.83    2126.17         .00       .00        .00       .85      4.97       .00     231.40
 *     22.450    244.92       .00   4532.00     2313.23    2218.77         .00       .00        .00       .93      5.09       .00     231.40
 *     22.450    245.00       .00   4907.00     2633.77    2273.23         .00       .00        .00       .97      5.15       .00     231.40
 *     22.450    245.22       .00   6113.00     3666.84    2446.16         .00       .00        .00      1.11      5.36       .00     231.40
 *     22.450    245.61    245.03   8384.00     5715.64    2668.36         .00       .00        .00      1.30      5.53       .00     231.40

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	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	22.602	243.18	.00	945.00	.00	945.00	.00	.00	.00	.00	2.90	.00	232.10
	22.602	245.46	.00	1980.00	307.90	1672.10	.00	.00	.00	.55	3.59	.00	232.10
	22.602	246.05	.00	2784.00	812.38	1968.09	3.53	.00	.00	.75	3.88	.17	232.10
	22.602	246.31	.00	3344.00	1169.12	2150.23	24.65	.00	.00	.86	4.08	.31	232.10
	22.602	246.55	.00	3957.00	1572.44	2317.15	67.41	.00	.00	.94	4.26	.44	232.10
	22.602	246.74	.00	4532.00	1948.64	2465.84	117.52	.00	.00	1.01	4.41	.53	232.10
	22.602	246.85	.00	4907.00	2195.24	2556.84	154.92	.00	.00	1.05	4.51	.57	232.10
	22.602	247.17	.00	6113.00	2994.14	2809.25	309.61	.00	.00	1.15	4.75	.67	232.10
	22.602	247.63	.00	8384.00	4481.88	3201.26	700.86	.00	.00	1.29	5.12	.83	232.10
	22.603	243.21	.00	945.00	.00	945.00	.00	945.00	.00	.00	2.88	.00	232.10
	22.603	245.46	.00	1980.00	307.68	1672.32	.00	1263.79	731.04	.55	3.59	.00	232.10
	22.603	246.05	.00	2784.00	812.43	1968.04	3.53	712.80	2066.94	.75	3.88	.17	232.10
	22.603	246.31	.00	3344.00	1172.29	2146.53	25.18	600.79	2744.76	.86	4.08	.31	232.10
	22.603	246.55	.00	3957.00	1574.12	2315.05	67.82	546.24	3398.88	.94	4.25	.44	232.10
	22.603	246.74	.00	4532.00	1947.58	2467.22	117.20	527.76	4008.49	1.01	4.42	.53	232.10
	22.603	246.85	.00	4907.00	2191.50	2561.89	153.62	522.09	4391.92	1.05	4.52	.57	232.10
	22.603	247.17	.00	6113.00	2994.24	2809.10	309.67	506.67	5615.03	1.15	4.75	.67	232.10
*	22.603	247.63	.00	8384.00	4482.89	3199.37	701.74	519.31	7922.77	1.29	5.12	.83	232.10
	22.644	243.44	.00	1072.00	.00	1072.00	.00	.00	.00	.00	3.15	.00	232.10
	22.644	245.82	.00	2113.00	502.62	1610.38	.00	.00	.00	.59	3.28	.01	232.10
	22.644	246.48	.00	2931.00	1123.38	1767.24	40.38	.00	.00	.72	3.28	.31	232.10
	22.644	246.78	.00	3476.00	1512.41	1867.97	95.62	.00	.00	.77	3.33	.41	232.10
	22.644	247.04	.00	4097.00	1939.20	1984.70	173.10	.00	.00	.81	3.41	.46	232.10
	22.644	247.25	.00	4709.00	2349.20	2094.79	265.01	.00	.00	.85	3.51	.50	232.10
	22.644	247.38	.00	5103.00	2611.15	2159.13	332.73	.00	.00	.88	3.56	.53	232.10
	22.644	247.72	.00	6378.00	3456.02	2347.74	574.24	.00	.00	.95	3.71	.62	232.10
	22.644	248.21	.00	8338.00	4783.83	2551.17	1003.00	.00	.00	1.01	3.82	.74	232.10
	100.190	244.74	.00	1072.00	.00	1072.00	.00	.00	.00	.00	2.97	.00	231.90
	100.190	247.13	.00	2113.00	.00	2101.71	11.28	.00	.00	.00	3.96	.38	231.90
*	100.190	247.80	.00	2931.00	21.50	2694.67	214.83	.00	.00	.33	4.63	.50	231.90
*	100.190	248.09	.00	3476.00	88.66	2911.84	475.50	.00	.00	.46	4.81	.61	231.90
*	100.190	248.36	.00	4097.00	204.70	3058.71	833.59	.00	.00	.58	4.89	.69	231.90
*	100.190	248.58	.00	4709.00	337.32	3147.41	1224.28	.00	.00	.67	4.90	.77	231.90
*	100.190	248.69	.00	5103.00	431.06	3182.90	1489.04	.00	.00	.72	4.89	.82	231.90
	100.190	249.04	.00	6378.00	747.14	3312.56	2318.29	.00	.00	.82	4.89	.94	231.90
	100.190	249.48	.00	8338.00	1329.27	3469.87	3538.86	.00	.00	.89	4.88	1.08	231.90
	100.640	248.41	.00	1072.00	.00	1072.00	.00	.00	.00	.00	2.48	.00	239.40
	100.640	250.87	.00	2113.00	.00	2113.00	.00	.00	.00	.00	2.75	.00	239.40
	100.640	251.96	.00	2931.00	.00	2931.00	.00	.00	.00	.00	3.15	.00	239.40
	100.640	252.45	.00	3476.00	.00	3476.00	.00	.00	.00	.00	3.45	.00	239.40
	100.640	252.89	.00	4097.00	.00	4097.00	.00	.00	.00	.00	3.82	.00	239.40
	100.640	253.24	.00	4709.00	.00	4709.00	.00	.00	.00	.00	4.18	.00	239.40
	100.640	253.44	.00	5103.00	.00	5103.00	.00	.00	.00	.00	4.40	.00	239.40
	100.640	254.05	.00	6378.00	.00	6378.00	.00	.00	.00	.00	5.09	.00	239.40
	100.640	254.78	.00	8338.00	.00	8338.00	.00	.00	.00	.00	6.10	.00	239.40

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	SECNO	CWSEL	CRIWS	Q	QLOB	QCH	QROB	QPR	QWEIR	VLOB	VCH	VROB	ELMIN
	100.640	248.42	.00	1072.00	.00	1072.00	.00	1072.00	.00	.00	2.47	.00	239.40
	100.640	250.88	.00	2113.00	.00	2113.00	.00	2113.00	.00	.00	2.75	.00	239.40
	100.640	251.97	.00	2931.00	.00	2931.00	.00	2931.00	.00	.00	3.15	.00	239.40
	100.640	252.46	.00	3476.00	.00	3476.00	.00	3476.00	.00	.00	3.45	.00	239.40
	100.640	252.90	.00	4097.00	.00	4097.00	.00	4097.00	.00	.00	3.81	.00	239.40
	100.640	253.62	.00	4709.00	.00	4709.00	.00	4709.00	.00	.00	3.97	.00	239.40
	100.640	253.91	.00	5103.00	.00	5103.00	.00	5103.00	.00	.00	4.14	.00	239.40
	100.640	254.87	.00	6378.00	.00	6378.00	.00	6378.00	.00	.00	4.62	.00	239.40
*	100.640	255.81	.00	8338.00	.00	3840.55	4497.45	6197.06	2160.01	.00	2.51	.71	239.40

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EXISTING CONDITIONS, A

SUMMARY PRINTOUT

	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	21.604	237.40	945.00	.00	.00	.00	.00	.00	322.23	48.33	.00	.00
	21.604	238.22	1980.00	.00	.00	.82	.00	.00	3311.31	3575.85	.00	.00
	21.604	238.53	2784.00	.00	.00	.31	.00	.00	4468.83	3914.83	.00	.00
	21.604	238.70	3344.00	.00	.00	.17	.00	.00	5150.87	4109.26	.00	.00
	21.604	238.88	3957.00	.00	.00	.18	.00	.00	5914.38	4362.63	.00	.00
	21.604	239.03	4532.00	.00	.00	.15	.00	.00	6577.62	4496.56	.00	.00
	21.604	239.12	4907.00	.00	.00	.09	.00	.00	6989.17	4641.65	.00	.00
	21.604	239.35	6113.00	.00	.00	.23	.00	.00	8094.30	4949.66	.00	.00
	21.604	239.79	8384.00	.00	.00	.44	.00	.00	10294.84	5055.09	.00	.00
	22.009	239.40	945.00	.00	.00	.00	2.00	.00	333.34	228.33	2112.00	15.89
*	22.009	240.03	1980.00	.00	.00	.64	1.81	.00	1969.92	3325.93	2112.00	128.03
*	22.009	240.34	2784.00	.00	.00	.31	1.81	.00	3030.61	3519.82	2112.00	181.80
*	22.009	240.53	3344.00	.00	.00	.19	1.83	.00	3674.31	3659.88	2112.00	213.94
*	22.009	240.70	3957.00	.00	.00	.17	1.82	.00	4328.18	3873.53	2112.00	248.30
	22.009	240.84	4532.00	.00	.00	.14	1.81	.00	4913.17	4042.56	2112.00	278.56
	22.009	240.93	4907.00	.00	.00	.09	1.81	.00	5282.31	4157.55	2112.00	297.49
	22.009	241.20	6113.00	.00	.00	.27	1.85	.00	6458.23	4450.58	2112.00	352.79
	22.009	241.60	8384.00	.00	.00	.41	1.81	.00	8378.04	4959.75	2112.00	452.68
	22.450	242.15	945.00	.00	.00	.00	2.75	.00	283.08	79.06	2368.00	32.62
	22.450	244.06	1980.00	.00	.00	1.91	4.03	.00	831.47	612.62	2368.00	201.80
	22.450	244.45	2784.00	.00	.00	.39	4.11	.00	1681.95	2481.63	2368.00	305.41

	22.450	244.62	3344.00	.00	.00	.17	4.09	.00	2139.12	2583.08	2368.00	366.29
	22.450	244.78	3957.00	.00	.00	.16	4.09	.00	2569.17	2691.57	2368.00	428.99
*	22.450	244.92	4532.00	.00	.00	.13	4.08	.00	2930.85	2736.80	2368.00	484.02
*	22.450	245.00	4907.00	.00	.00	.08	4.07	.00	3152.95	2764.21	2368.00	518.43
*	22.450	245.22	6113.00	.00	.00	.23	4.03	.00	3772.76	2803.32	2368.00	620.83
*	22.450	245.61	8384.00	.00	.00	.38	4.00	.00	4871.79	2870.76	2368.00	800.03
	22.602	243.18	945.00	.00	.00	.00	1.03	.00	326.06	54.42	800.00	38.22
	22.602	245.46	1980.00	.00	.00	2.28	1.40	.00	1030.10	818.04	800.00	219.70
	22.602	246.05	2784.00	.00	.00	.58	1.60	.00	1605.34	1261.07	800.00	337.38
	22.602	246.31	3344.00	.00	.00	.27	1.69	.00	1971.89	1516.72	800.00	406.11
	22.602	246.55	3957.00	.00	.00	.24	1.77	.00	2363.08	1714.17	800.00	476.55
	22.602	246.74	4532.00	.00	.00	.19	1.83	.00	2706.28	1877.90	800.00	538.20
	22.602	246.85	4907.00	.00	.00	.11	1.86	.00	2928.11	2065.91	800.00	576.74
	22.602	247.17	6113.00	.00	.00	.32	1.95	.00	3664.02	2612.36	800.00	691.48
	22.602	247.63	8384.00	.00	.00	.46	2.03	.00	4932.93	2937.53	800.00	892.03

	SECNO	CWSEL	Q	ELTRD	ELLC	DIFWSP	DIFWSX	DIFKWS	AREA	TOPWID	XLCH	VOL
	22.603	243.21	945.00	244.10	246.00	.00	.03	.00	327.75	54.61	15.00	38.33
	22.603	245.46	1980.00	244.10	246.00	2.25	.00	.00	1029.69	817.86	15.00	220.06
	22.603	246.05	2784.00	244.10	246.00	.58	.00	.00	1605.44	1261.16	15.00	337.93
	22.603	246.31	3344.00	244.10	246.00	.27	.00	.00	1978.79	1520.42	15.00	406.79
	22.603	246.55	3957.00	244.10	246.00	.24	.00	.00	2367.09	1715.87	15.00	477.36
	22.603	246.74	4532.00	244.10	246.00	.19	.00	.00	2703.53	1875.83	15.00	539.13
	22.603	246.85	4907.00	244.10	246.00	.11	.00	.00	2917.58	2056.11	15.00	577.74
	22.603	247.17	6113.00	244.10	246.00	.32	.00	.00	3664.38	2612.46	15.00	692.75
*	22.603	247.63	8384.00	244.10	246.00	.46	.00	.00	4937.28	2938.58	15.00	893.73
	22.644	243.44	1072.00	.00	.00	.00	.23	.00	340.61	56.03	225.00	40.06
	22.644	245.82	2113.00	.00	.00	2.38	.36	.00	1344.37	988.35	225.00	229.85
	22.644	246.48	2931.00	.00	.00	.65	.43	.00	2236.17	1655.99	225.00	354.51
	22.644	246.78	3476.00	.00	.00	.30	.46	.00	2768.06	1923.95	225.00	427.31
	22.644	247.04	4097.00	.00	.00	.27	.49	.00	3338.34	2310.77	225.00	501.93
	22.644	247.25	4709.00	.00	.00	.21	.51	.00	3875.08	2669.19	225.00	567.30
	22.644	247.38	5103.00	.00	.00	.12	.53	.00	4208.35	2756.55	225.00	608.12
	22.644	247.72	6378.00	.00	.00	.35	.55	.00	5207.83	3003.34	225.00	730.17
	22.644	248.21	8338.00	.00	.00	.48	.58	.00	6734.66	3241.55	225.00	942.38
	100.190	244.74	1072.00	.00	.00	.00	1.30	.00	361.19	64.67	980.00	47.95
	100.190	247.13	2113.00	.00	.00	2.39	1.31	.00	560.47	289.36	980.00	251.43
*	100.190	247.80	2931.00	.00	.00	.67	1.32	.00	1076.76	1398.29	980.00	391.32
*	100.190	248.09	3476.00	.00	.00	.29	1.32	.00	1582.74	2110.53	980.00	475.23
*	100.190	248.36	4097.00	.00	.00	.27	1.32	.00	2190.03	2437.09	980.00	562.39
*	100.190	248.58	4709.00	.00	.00	.22	1.32	.00	2729.63	2653.88	980.00	639.18
*	100.190	248.69	5103.00	.00	.00	.12	1.32	.00	3073.37	2705.83	980.00	687.20
	100.190	249.04	6378.00	.00	.00	.35	1.32	.00	4043.36	2945.19	980.00	830.24
	100.190	249.48	8338.00	.00	.00	.44	1.27	.00	5467.52	3401.97	980.00	1074.18
	100.640	248.41	1072.00	.00	.00	.00	3.68	.00	432.74	123.20	2376.00	69.60
	100.640	250.87	2113.00	.00	.00	2.46	3.74	.00	767.50	149.24	2376.00	287.57
	100.640	251.96	2931.00	.00	.00	1.09	4.16	.00	931.30	152.03	2376.00	444.81
	100.640	252.45	3476.00	.00	.00	.49	4.36	.00	1006.67	153.04	2376.00	543.20
	100.640	252.89	4097.00	.00	.00	.44	4.53	.00	1072.71	153.91	2376.00	647.05
	100.640	253.24	4709.00	.00	.00	.35	4.67	.00	1127.34	154.64	2376.00	738.55
	100.640	253.44	5103.00	.00	.00	.20	4.75	.00	1158.59	155.05	2376.00	795.83
	100.640	254.05	6378.00	.00	.00	.61	5.01	.00	1252.98	156.29	2376.00	965.13
	100.640	254.78	8338.00	.00	.00	.73	5.30	.00	1366.87	157.00	2376.00	1246.68
	100.640	248.42	1072.00	255.50	253.50	.00	.01	.00	433.95	123.23	10.00	69.70
	100.640	250.88	2113.00	255.50	253.50	2.46	.01	.00	767.67	149.24	10.00	287.75
	100.640	251.97	2931.00	255.50	253.50	1.09	.01	.00	931.83	152.04	10.00	445.02
	100.640	252.46	3476.00	255.50	253.50	.49	.01	.00	1007.33	153.04	10.00	543.43
	100.640	252.90	4097.00	255.50	253.50	.44	.02	.00	1075.28	153.95	10.00	647.30
	100.640	253.62	4709.00	255.50	253.50	.72	.38	.00	1186.53	155.42	10.00	738.82
	100.640	253.91	5103.00	255.50	253.50	.29	.47	.00	1231.53	156.01	10.00	796.11
	100.640	254.87	6378.00	255.50	253.50	.95	.82	.00	1381.26	157.00	10.00	965.43
*	100.640	255.81	8338.00	255.50	253.50	.95	1.03	.00	7830.91	2377.00	10.00	1247.73

SUMMARY OF ERRORS AND SPECIAL NOTES

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WARNING SECNO=     22.009  PROFILE=  2  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     22.009  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     22.009  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     22.009  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=     22.450  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     22.450  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     22.450  PROFILE=  8  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=     22.450  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

CAUTION SECNO=     22.603  PROFILE=  9  HYDRAULIC JUMP D.S.

WARNING SECNO=    100.190  PROFILE=  3  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    100.190  PROFILE=  4  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    100.190  PROFILE=  5  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    100.190  PROFILE=  6  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
WARNING SECNO=    100.190  PROFILE=  7  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE

WARNING SECNO=    100.640  PROFILE=  9  CONVEYANCE CHANGE OUTSIDE ACCEPTABLE RANGE
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Original HEC-2 Files combine Viney Slough Ditch and Higginbottom Creek imported into HEC-RAS for affected zone

HEC-RAS Plan: Imported Pla River: RIVER-1 Reach: Reach-1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Reach-1	3608	1.01 YEAR	1072.00	239.40	248.42	244.00	248.51	0.001642	2.47	433.33	123.21	0.23
Reach-1	3608	2 YEAR	2113.00	239.40	250.88	246.12	250.99	0.001232	2.75	767.40	149.24	0.21
Reach-1	3608	5 YEAR	2931.00	239.40	251.96	247.33	252.12	0.001276	3.15	931.37	664.17	0.22
Reach-1	3608	10 YEAR	3476.00	239.40	252.45	247.76	252.63	0.001406	3.46	1005.11	1278.68	0.24
Reach-1	3608	25 YEAR	4097.00	239.40	252.84	248.14	253.07	0.001623	3.85	1064.88	1710.69	0.26
Reach-1	3608	50 YEAR	4709.00	239.40	253.20	248.47	253.47	0.001823	4.20	1120.16	2945.34	0.28
Reach-1	3608	100 YEAR	5103.00	239.40	253.88	248.67	254.15	0.001605	4.16	1225.93	3837.45	0.26
Reach-1	3608	500 YEAR	6278.00	239.40	254.32	249.25	254.68	0.002040	4.85	1295.04	4100.15	0.30
Reach-1	3608	SPF	8338.00	239.40	255.63	250.29	255.68	0.000526	2.71	7384.06	4584.86	0.15
Reach-1	3602		Bridge									
Reach-1	3596	1.01 YEAR	1072.00	239.40	248.41	244.00	248.51	0.001648	2.48	432.84	123.20	0.23
Reach-1	3596	2 YEAR	2113.00	239.40	250.87	246.12	250.99	0.001236	2.76	766.68	149.21	0.21
Reach-1	3596	5 YEAR	2931.00	239.40	251.96	247.33	252.11	0.001281	3.15	930.39	658.27	0.22
Reach-1	3596	10 YEAR	3476.00	239.40	252.44	247.76	252.63	0.001411	3.46	1003.85	1267.90	0.24
Reach-1	3596	25 YEAR	4097.00	239.40	252.83	248.14	253.06	0.001631	3.85	1063.18	1693.48	0.26
Reach-1	3596	50 YEAR	4709.00	239.40	253.18	248.47	253.46	0.001834	4.21	1117.98	2894.98	0.28
Reach-1	3596	100 YEAR	5103.00	239.40	253.39	248.67	253.69	0.001969	4.44	1149.94	3279.26	0.29
Reach-1	3596	500 YEAR	6278.00	239.40	253.95	249.25	254.35	0.002359	5.07	1237.34	3880.93	0.32
Reach-1	3596	SPF	8338.00	239.40	254.68	250.29	255.27	0.003123	6.17	1351.93	4302.00	0.37
Reach-1	1221	1.01 YEAR	1072.00	231.90	244.61		244.75	0.001509	3.04	352.91	64.01	0.23
Reach-1	1221	2 YEAR	2113.00	231.90	247.13		247.37	0.001893	3.96	560.01	288.04	0.27
Reach-1	1221	5 YEAR	2931.00	231.90	247.83	242.09	248.14	0.002245	4.60	1125.04	1449.52	0.29
Reach-1	1221	10 YEAR	3476.00	231.90	248.16	243.11	248.45	0.002258	4.74	1722.42	2202.46	0.30
Reach-1	1221	25 YEAR	4097.00	231.90	248.45		248.70	0.002132	4.72	2411.92	2525.75	0.29
Reach-1	1221	50 YEAR	4709.00	231.90	248.67		248.90	0.002074	4.74	2985.16	2699.19	0.29
Reach-1	1221	100 YEAR	5103.00	231.90	248.79		249.00	0.002027	4.73	3315.26	2723.96	0.28
Reach-1	1221	500 YEAR	6278.00	231.90	249.13		249.31	0.001930	4.73	4296.33	3196.45	0.28
Reach-1	1221	SPF	8338.00	231.90	249.60		249.75	0.001772	4.70	5884.49	3420.22	0.27
Reach-1	241	1.01 YEAR	945.00	232.10	243.46		243.58	0.000921	2.76	341.88	56.16	0.20
Reach-1	241	2 YEAR	1980.00	232.10	245.99		246.09	0.000843	2.94	1537.72	1201.35	0.20
Reach-1	241	5 YEAR	2784.00	232.10	246.57		246.67	0.000934	3.18	2389.83	1725.52	0.21
Reach-1	241	10 YEAR	3344.00	232.10	246.88		246.98	0.000956	3.30	2972.71	2106.68	0.21
Reach-1	241	25 YEAR	3957.00	232.10	247.15		247.25	0.001007	3.47	3603.74	2595.90	0.22
Reach-1	241	50 YEAR	4532.00	232.10	247.37		247.47	0.001005	3.53	4197.80	2753.83	0.22
Reach-1	241	100 YEAR	4907.00	232.10	247.51		247.60	0.000995	3.55	4586.56	2852.45	0.22
Reach-1	241	500 YEAR	6113.00	232.10	247.87		247.95	0.001015	3.69	5645.45	3105.23	0.22
Reach-1	241	SPF	8384.00	232.10	248.37		248.45	0.001043	3.88	7251.13	3273.26	0.23
Reach-1	17	1.01 YEAR	945.00	232.10	243.24	236.47	243.36	0.001012	2.87	329.33	54.79	0.21
Reach-1	17	2 YEAR	1980.00	232.10	245.68	238.81	245.83	0.001111	3.34	1221.21	912.01	0.22
Reach-1	17	5 YEAR	2784.00	232.10	246.16	240.22	246.32	0.001425	3.85	1750.26	1378.15	0.25
Reach-1	17	10 YEAR	3344.00	232.10	246.43	241.21	246.60	0.001559	4.07	2161.41	1616.58	0.27
Reach-1	17	25 YEAR	3957.00	232.10	246.66	242.44	246.84	0.001689	4.30	2561.52	1792.69	0.28
Reach-1	17	50 YEAR	4532.00	232.10	246.86	245.33	247.04	0.001786	4.50	2936.23	2073.42	0.29
Reach-1	17	100 YEAR	4907.00	232.10	248.98	245.57	247.17	0.001868	4.66	3196.56	2249.98	0.30
Reach-1	17	500 YEAR	6113.00	232.10	247.30	246.08	247.49	0.001992	4.94	4007.01	2704.11	0.31
Reach-1	17	SPF	8384.00	232.10	247.77	246.53	247.96	0.002135	5.31	5349.99	3036.82	0.32
Reach-1	8.5		Bridge									
Reach-1	0	1.01 YEAR	945.00	232.10	243.18		243.31	0.001037	2.90	326.17	54.43	0.21
Reach-1	0	2 YEAR	1980.00	232.10	245.62		245.77	0.001170	3.41	1167.37	881.63	0.23
Reach-1	0	5 YEAR	2784.00	232.10	246.14		246.31	0.001449	3.88	1726.70	1359.80	0.26
Reach-1	0	10 YEAR	3344.00	232.10	246.41		246.59	0.001585	4.10	2135.72	1602.81	0.27
Reach-1	0	25 YEAR	3957.00	232.10	246.65		246.83	0.001720	4.34	2533.59	1782.27	0.28
Reach-1	0	50 YEAR	4532.00	232.10	246.85		247.03	0.001813	4.53	2905.34	2044.68	0.29
Reach-1	0	100 YEAR	4907.00	232.10	246.97		247.16	0.001897	4.69	3163.70	2231.65	0.30
Reach-1	0	500 YEAR	6113.00	232.10	247.29		247.48	0.002031	4.98	3964.55	2692.93	0.31
Reach-1	0	SPF	8384.00	232.10	247.75		247.95	0.002177	5.36	5299.68	3025.01	0.32
Reach-1	-799	1.01 YEAR	945.00	231.40	242.15		242.33	0.001428	3.37	282.84	78.37	0.24
Reach-1	-799	2 YEAR	1980.00	231.40	244.19	238.57	244.46	0.002225	4.46	1081.87	2408.92	0.31
Reach-1	-799	5 YEAR	2784.00	231.40	244.50	239.99	244.75	0.002502	4.79	1837.74	2513.19	0.33
Reach-1	-799	10 YEAR	3344.00	231.40	244.67	240.92	244.91	0.002661	4.97	2260.99	2630.12	0.34
Reach-1	-799	25 YEAR	3957.00	231.40	244.83	243.68	245.06	0.002740	5.08	2699.84	2708.00	0.35
Reach-1	-799	50 YEAR	4532.00	231.40	244.96	244.67	245.17	0.002844	5.20	3046.20	2751.07	0.35
Reach-1	-799	100 YEAR	4907.00	231.40	245.04	244.77	245.25	0.002873	5.25	3273.14	2772.36	0.36
Reach-1	-799	500 YEAR	6113.00	231.40	245.26	244.90	245.46	0.003028	5.43	3891.66	2810.63	0.37
Reach-1	-799	SPF	8384.00	231.40	245.64	245.04	245.82	0.003133	5.61	4972.48	2879.73	0.37
Reach-1	-3167	1.01 YEAR	945.00	229.10	239.40	233.35	239.54	0.000983	3.02	333.71	229.27	0.21

HEC-RAS Plan: Imported Pla River: RIVER-1 Reach: Reach-1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Reach-1	-3167	2 YEAR	1980.00	229.10	240.03	235.56	240.19	0.001500	3.83	1983.02	3327.25	0.26
Reach-1	-3167	5 YEAR	2784.00	229.10	240.35	236.94	240.46	0.001388	3.73	3061.42	3526.02	0.25
Reach-1	-3167	10 YEAR	3344.00	229.10	240.53	237.79	240.62	0.001329	3.68	3719.71	3676.42	0.24
Reach-1	-3167	25 YEAR	3957.00	229.10	240.70	240.24	240.78	0.001304	3.67	4358.96	3882.60	0.24
Reach-1	-3167	50 YEAR	4532.00	229.10	240.85	240.32	240.92	0.001266	3.64	4955.68	4054.57	0.24
Reach-1	-3167	100 YEAR	4907.00	229.10	240.94	240.36	241.01	0.001255	3.64	5317.58	4170.41	0.24
Reach-1	-3167	500 YEAR	6113.00	229.10	241.22	240.48	241.27	0.001191	3.58	6520.41	4474.58	0.23
Reach-1	-3167	SPF	8384.00	229.10	241.63	240.68	241.68	0.001153	3.60	8503.81	4964.22	0.23
Reach-1	-5221	1.01 YEAR	945.00	226.90	237.40	231.15	237.53	0.000914	2.93	322.23	2806.31	0.20
Reach-1	-5221	2 YEAR	1980.00	226.90	238.22	233.36	238.26	0.000598	2.46	3311.32	3575.86	0.16
Reach-1	-5221	5 YEAR	2784.00	226.90	238.53	234.75	238.57	0.000609	2.51	4468.85	3914.85	0.17
Reach-1	-5221	10 YEAR	3344.00	226.90	238.70	235.59	238.73	0.000629	2.57	5150.89	4109.27	0.17
Reach-1	-5221	25 YEAR	3957.00	226.90	238.88	238.04	238.91	0.000633	2.60	5914.39	4362.64	0.17
Reach-1	-5221	50 YEAR	4532.00	226.90	239.03	238.11	239.06	0.000641	2.63	6577.64	4496.57	0.17
Reach-1	-5221	100 YEAR	4907.00	226.90	239.12	238.16	239.15	0.000645	2.65	6989.19	4641.65	0.17
Reach-1	-5221	500 YEAR	6113.00	226.90	239.35	238.29	239.38	0.000698	2.78	8094.32	4949.66	0.18
Reach-1	-5221	SPF	8384.00	226.90	239.79	238.49	239.82	0.000689	2.85	10294.86	5055.09	0.18

Cross-Sections from DFIRM survey added from Sta 3541 to -4661 from Higginbottom-BA Geometric Data

HEC-RAS Plan: COE-NEWxs River: RIVER-1 Reach: Reach-1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Reach-1	3608	1.01 YEAR	1072.00	239.40	245.47	244.00	246.09	0.010913	6.31	169.96	48.29	0.59
Reach-1	3608	2 YEAR	2113.00	239.40	253.40	246.12	253.45	0.000335	1.83	1152.14	3298.55	0.12
Reach-1	3608	5 YEAR	2931.00	239.40	250.10	247.33	250.41	0.003933	4.49	652.56	145.64	0.37
Reach-1	3608	10 YEAR	3476.00	239.40	251.02	247.76	251.32	0.003063	4.41	788.70	149.89	0.34
Reach-1	3608	25 YEAR	4097.00	239.40	251.93	248.14	252.23	0.002541	4.42	925.95	631.65	0.32
Reach-1	3608	50 YEAR	4709.00	239.40	252.73	248.47	253.04	0.002254	4.49	1048.30	1595.70	0.30
Reach-1	3608	100 YEAR	5103.00	239.40	253.87	248.67	254.14	0.001608	4.16	1225.24	3834.80	0.26
Reach-1	3608	500 YEAR	6278.00	239.40	253.86	249.25	254.27	0.002449	5.13	1222.79	3825.48	0.32
Reach-1	3608	SPF	8338.00	239.40	254.39	250.29	255.02	0.003503	6.38	1306.05	4141.89	0.39
Reach-1	3602		Bridge									
Reach-1	3596	1.01 YEAR	1072.00	239.40	245.47	244.00	246.09	0.010916	6.31	169.92	48.28	0.59
Reach-1	3596	2 YEAR	2113.00	239.40	253.40	246.12	253.45	0.000336	1.83	1151.92	3297.27	0.12
Reach-1	3596	5 YEAR	2931.00	239.40	250.07	247.33	250.39	0.004002	4.52	648.96	145.52	0.38
Reach-1	3596	10 YEAR	3476.00	239.40	251.00	247.76	251.30	0.003100	4.42	785.63	149.80	0.34
Reach-1	3596	25 YEAR	4097.00	239.40	251.91	248.14	252.22	0.002567	4.44	923.10	614.61	0.32
Reach-1	3596	50 YEAR	4709.00	239.40	252.71	248.47	253.03	0.002273	4.50	1045.51	1581.03	0.30
Reach-1	3596	100 YEAR	5103.00	239.40	253.20	248.67	253.52	0.002135	4.55	1121.10	2964.04	0.30
Reach-1	3596	500 YEAR	6278.00	239.40	253.53	249.25	253.98	0.002802	5.36	1172.34	3413.35	0.34
Reach-1	3596	SPF	8338.00	239.40	253.73	250.29	254.47	0.004554	6.93	1202.78	3749.09	0.44
Reach-1	3541	1.01 YEAR	1072.00	238.43	244.06		245.20	0.016473	8.57	125.03	36.04	0.81
Reach-1	3541	2 YEAR	2113.00	238.43	253.39		253.43	0.000264	1.90	2887.76	7697.40	0.12
Reach-1	3541	5 YEAR	2931.00	238.43	248.81		249.87	0.007824	8.25	355.33	400.27	0.61
Reach-1	3541	10 YEAR	3476.00	238.43	249.72		250.81	0.007407	8.39	414.27	1183.35	0.60
Reach-1	3541	25 YEAR	4097.00	238.43	250.58	248.02	251.74	0.007221	8.63	474.90	2907.52	0.60
Reach-1	3541	50 YEAR	4709.00	238.43	251.33		252.55	0.007048	8.87	530.77	4698.62	0.59
Reach-1	3541	100 YEAR	5103.00	238.43	251.79		253.05	0.007052	9.00	566.81	5151.02	0.60
Reach-1	3541	500 YEAR	6278.00	238.43	252.85	250.10	253.66	0.005039	7.96	1745.12	6528.06	0.51
Reach-1	3541	SPF	8338.00	238.43	253.76	251.63	254.08	0.002526	6.04	3658.34	8185.34	0.37
Reach-1	2441	1.01 YEAR	1072.00	233.86	242.34		242.45	0.000750	2.66	403.54	66.65	0.19
Reach-1	2441	2 YEAR	2113.00	233.86	253.34		253.35	0.000027	0.73	8298.55	8634.42	0.04
Reach-1	2441	5 YEAR	2931.00	233.86	246.76		247.01	0.001042	4.00	733.05	62.58	0.24
Reach-1	2441	10 YEAR	3476.00	233.86	247.47		247.77	0.001180	4.39	792.62	301.22	0.25
Reach-1	2441	25 YEAR	4097.00	233.86	248.01		248.38	0.001401	4.88	839.09	691.98	0.28
Reach-1	2441	50 YEAR	4709.00	233.86	248.43		248.88	0.001640	5.37	877.34	1517.91	0.30
Reach-1	2441	100 YEAR	5103.00	233.86	248.68		249.18	0.001792	5.67	920.41	1774.87	0.32
Reach-1	2441	500 YEAR	6278.00	233.86	249.36		250.00	0.002290	6.45	1113.20	3398.43	0.36
Reach-1	2441	SPF	8338.00	233.86	250.53	244.30	251.15	0.002733	6.74	1925.42	5504.43	0.39
Reach-1	1798	1.01 YEAR	1072.00	233.44	242.00	236.46	242.06	0.000427	2.32	461.34	71.83	0.16
Reach-1	1798	2 YEAR	2113.00	233.44	253.34	237.89	253.34	0.000000	0.11	34882.55	8668.92	0.01
Reach-1	1798	5 YEAR	2931.00	233.44	246.25	238.81	246.46	0.000676	3.66	801.23	87.95	0.21
Reach-1	1798	10 YEAR	3476.00	233.44	246.88	239.36	247.14	0.000787	4.05	857.57	823.83	0.23
Reach-1	1798	25 YEAR	4097.00	233.44	247.29	239.94	247.62	0.000972	4.58	894.90	1215.92	0.26
Reach-1	1798	50 YEAR	4709.00	233.44	247.57	240.48	247.98	0.001188	5.12	921.01	1411.95	0.29
Reach-1	1798	100 YEAR	5103.00	233.44	247.72	240.81	248.18	0.001337	5.48	955.12	1733.94	0.30
Reach-1	1798	500 YEAR	6278.00	233.44	248.07	241.73	248.70	0.001789	6.40	1124.45	2440.54	0.35
Reach-1	1798	SPF	8338.00	233.44	248.42	243.17	249.36	0.002703	7.96	1407.87	3383.95	0.44
Reach-1	1131	1.01 YEAR	1072.00	233.04	241.67		241.77	0.000516	2.51	427.09	68.55	0.18
Reach-1	1131	2 YEAR	2113.00	233.04	253.34		253.34	0.000000	0.09	42613.37	8494.90	0.00
Reach-1	1131	5 YEAR	2931.00	233.04	245.71		245.95	0.000839	4.00	737.54	111.14	0.24
Reach-1	1131	10 YEAR	3476.00	233.04	246.25		246.55	0.000980	4.42	869.99	525.72	0.26
Reach-1	1131	25 YEAR	4097.00	233.04	246.62		246.94	0.001080	4.71	1315.87	1324.69	0.27
Reach-1	1131	50 YEAR	4709.00	233.04	246.84		247.17	0.001171	4.95	1624.73	1436.06	0.28
Reach-1	1131	100 YEAR	5103.00	233.04	246.96		247.30	0.001221	5.09	1828.79	1828.63	0.29
Reach-1	1131	500 YEAR	6278.00	233.04	247.28		247.61	0.001322	5.36	2582.39	2800.87	0.30
Reach-1	1131	SPF	8338.00	233.04	247.68		247.96	0.001349	5.50	3880.97	3499.43	0.31
Reach-1	130	1.01 YEAR	945.00	232.01	241.25	235.30	241.31	0.000365	2.04	463.56	79.39	0.15
Reach-1	130	2 YEAR	198032.00	232.01	252.86	249.07	253.01	0.000651	4.40	66160.21	10910.67	0.23
Reach-1	130	5 YEAR	2784.00	232.01	244.95	237.97	245.09	0.000784	3.10	941.37	760.66	0.22
Reach-1	130	10 YEAR	3344.00	232.01	245.39	238.58	245.56	0.000883	3.38	1244.40	2317.12	0.24
Reach-1	130	25 YEAR	3957.00	232.01	245.73	239.19	245.89	0.000900	3.48	1827.97	3477.35	0.24
Reach-1	130	50 YEAR	4532.00	232.01	245.92	239.71	246.08	0.000929	3.58	2297.19	3890.88	0.24
Reach-1	130	100 YEAR	4907.00	232.01	246.02	240.04	246.18	0.000950	3.64	2561.27	4192.41	0.25
Reach-1	130	500 YEAR	6113.00	232.01	246.26	241.06	246.42	0.001054	3.88	3284.64	4928.92	0.26
Reach-1	130	SPF	8384.00	232.01	246.59	243.10	246.75	0.001189	4.20	4693.29	5960.26	0.28
Reach-1	90		Bridge									
Reach-1	0	1.01 YEAR	945.00	231.57	241.15		241.23	0.000444	2.25	420.92	71.33	0.16
Reach-1	0	2 YEAR	198032.00	231.57	252.76		252.92	0.000581	4.35	65241.62	9783.99	0.21
Reach-1	0	5 YEAR	2784.00	231.57	244.71		244.90	0.001037	3.54	818.09	506.47	0.25
Reach-1	0	10 YEAR	3344.00	231.57	245.16		245.37	0.001100	3.76	1222.92	1856.65	0.26
Reach-1	0	25 YEAR	3957.00	231.57	245.49		245.69	0.001082	3.80	1758.46	2670.70	0.26
Reach-1	0	50 YEAR	4532.00	231.57	245.70		245.87	0.001060	3.82	2306.88	3486.53	0.26
Reach-1	0	100 YEAR	4907.00	231.57	245.81		245.97	0.001050	3.82	2659.77	4209.83	0.26

HEC-RAS Plan: COE-NEWxs River: RIVER-1 Reach: Reach-1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Reach-1	0	500 YEAR	6113.00	231.57	246.05		246.20	0.001084	3.90	3542.28	5349.44	0.26
Reach-1	0	SPF	8384.00	231.57	246.34		246.49	0.001188	4.19	4817.20	6739.93	0.28
Reach-1	-561	1.01 YEAR	945.00	230.60	240.83		240.94	0.000567	2.84	357.70	2136.99	0.18
Reach-1	-561	2 YEAR	198032.00	230.60	252.22		252.41	0.000930	5.39	57413.98	10082.39	0.27
Reach-1	-561	5 YEAR	2784.00	230.60	243.70		244.09	0.001745	5.06	624.03	4536.27	0.33
Reach-1	-561	10 YEAR	3344.00	230.60	244.02	238.87	244.46	0.002047	5.51	795.49	4778.99	0.36
Reach-1	-561	25 YEAR	3957.00	230.60	244.31	239.58	244.74	0.002182	5.71	1067.76	5200.71	0.37
Reach-1	-561	50 YEAR	4532.00	230.60	244.51	240.20	244.92	0.002213	5.74	1317.71	5437.14	0.37
Reach-1	-561	100 YEAR	4907.00	230.60	244.64	240.59	245.01	0.002204	5.73	1504.50	5968.31	0.37
Reach-1	-561	500 YEAR	6113.00	230.60	244.96	241.71	245.26	0.002037	5.51	2341.43	7366.96	0.36
Reach-1	-561	SPF	8384.00	230.60	245.38		245.58	0.001709	5.05	4122.26	8952.33	0.33
Reach-1	-1421	1.01 YEAR	945.00	230.65	240.41		240.50	0.000455	2.39	395.37	3270.61	0.17
Reach-1	-1421	2 YEAR	198032.00	230.65	251.63		251.79	0.000611	4.52	63216.13	9781.07	0.22
Reach-1	-1421	5 YEAR	2784.00	230.65	242.80		242.98	0.000895	3.80	1220.05	4845.36	0.24
Reach-1	-1421	10 YEAR	3344.00	230.65	243.08		243.24	0.000907	3.86	1519.71	4984.22	0.24
Reach-1	-1421	25 YEAR	3957.00	230.65	243.34		243.49	0.000901	3.89	1849.14	5155.87	0.24
Reach-1	-1421	50 YEAR	4532.00	230.65	243.51		243.65	0.000907	3.93	2085.10	5206.86	0.24
Reach-1	-1421	100 YEAR	4907.00	230.65	243.62		243.75	0.000914	3.96	2227.01	5233.78	0.24
Reach-1	-1421	500 YEAR	6113.00	230.65	243.91		244.05	0.000925	4.02	2671.57	5542.42	0.24
Reach-1	-1421	SPF	8384.00	230.65	244.36		244.48	0.000926	4.09	3943.84	7904.67	0.25
Reach-1	-2193	1.01 YEAR	945.00	230.86	240.03		240.12	0.000529	2.43	389.56	3829.20	0.18
Reach-1	-2193	2 YEAR	198032.00	230.86	251.18		251.34	0.000560	4.51	62663.48	9253.51	0.21
Reach-1	-2193	5 YEAR	2784.00	230.86	242.01		242.19	0.001138	3.95	1127.40	5032.45	0.27
Reach-1	-2193	10 YEAR	3344.00	230.86	242.25		242.43	0.001193	4.08	1375.37	5158.35	0.27
Reach-1	-2193	25 YEAR	3957.00	230.86	242.49		242.67	0.001248	4.20	1648.53	5352.06	0.28
Reach-1	-2193	50 YEAR	4532.00	230.86	242.67		242.84	0.001220	4.18	1889.36	5379.39	0.28
Reach-1	-2193	100 YEAR	4907.00	230.86	242.78		242.94	0.001209	4.18	2027.10	5383.23	0.28
Reach-1	-2193	500 YEAR	6113.00	230.86	243.09		243.24	0.001171	4.15	2452.31	5817.56	0.27
Reach-1	-2193	SPF	8384.00	230.86	243.54		243.69	0.001144	4.17	3460.66	6830.58	0.27
Reach-1	-3045	1.01 YEAR	945.00	231.00	239.43		239.56	0.000827	2.89	326.44	4231.72	0.22
Reach-1	-3045	2 YEAR	198032.00	231.00	250.80		250.78	0.000825	5.22	60206.37	8313.07	0.25
Reach-1	-3045	5 YEAR	2784.00	231.00	241.33		241.40	0.000702	3.04	1989.05	5575.97	0.21
Reach-1	-3045	10 YEAR	3344.00	231.00	241.51		241.59	0.000758	3.20	2261.38	5837.85	0.22
Reach-1	-3045	25 YEAR	3957.00	231.00	241.73		241.80	0.000767	3.26	2630.75	6051.55	0.22
Reach-1	-3045	50 YEAR	4532.00	231.00	241.90		241.98	0.000782	3.32	2969.45	6354.53	0.22
Reach-1	-3045	100 YEAR	4907.00	231.00	242.00		242.08	0.000785	3.35	3191.47	6367.93	0.22
Reach-1	-3045	500 YEAR	6113.00	231.00	242.32		242.39	0.000798	3.37	3891.86	6696.39	0.22
Reach-1	-3045	SPF	8384.00	231.00	242.77		242.84	0.000819	3.41	5038.85	6866.21	0.23
Reach-1	-4001	1.01 YEAR	945.00	229.86	238.60		238.73	0.000908	2.98	317.31	4594.80	0.23
Reach-1	-4001	2 YEAR	198032.00	229.86	249.46		249.73	0.001564	7.08	50367.34	9030.69	0.35
Reach-1	-4001	5 YEAR	2784.00	229.86	240.71	237.14	240.77	0.000615	2.83	2260.43	7116.11	0.19
Reach-1	-4001	10 YEAR	3344.00	229.86	240.77		240.85	0.000793	3.23	2374.42	7131.28	0.22
Reach-1	-4001	25 YEAR	3957.00	229.86	240.98		241.05	0.000813	3.20	2735.54	7180.82	0.22
Reach-1	-4001	50 YEAR	4532.00	229.86	241.13		241.21	0.000828	3.28	3020.69	7215.33	0.23
Reach-1	-4001	100 YEAR	4907.00	229.86	241.23		241.30	0.000840	3.33	3199.89	7250.85	0.23
Reach-1	-4001	500 YEAR	6113.00	229.86	241.52		241.59	0.000872	3.47	3759.89	7472.10	0.23
Reach-1	-4001	SPF	8384.00	229.86	241.90		241.99	0.000977	3.79	4649.19	7927.40	0.25
Reach-1	-4661	1.01 YEAR	945.00	229.17	237.93		238.09	0.001047	3.25	291.12	4734.94	0.24
Reach-1	-4661	2 YEAR	198032.00	229.17	247.81		248.28	0.003191	9.41	39437.86	8502.59	0.49
Reach-1	-4661	5 YEAR	2784.00	229.17	238.57	236.60	239.70	0.006799	8.53	326.36	5323.68	0.63
Reach-1	-4661	10 YEAR	3344.00	229.17	239.44	239.44	239.87	0.003317	6.18	1161.91	6736.90	0.44
Reach-1	-4661	25 YEAR	3957.00	229.17	239.56	239.56	240.01	0.003730	6.59	1315.62	6785.14	0.47
Reach-1	-4661	50 YEAR	4532.00	229.17	239.67	239.67	240.12	0.004027	6.87	1453.93	6795.78	0.49
Reach-1	-4661	100 YEAR	4907.00	229.17	239.73	239.73	240.19	0.004241	7.07	1531.55	6798.37	0.50
Reach-1	-4661	500 YEAR	6113.00	229.17	239.88	239.88	240.39	0.005021	7.74	1732.71	6805.05	0.55
Reach-1	-4661	SPF	8384.00	229.17	240.32		240.73	0.004619	7.55	2360.03	7204.12	0.53
Reach-1	-5221	1.01 YEAR	945.00	226.90	237.40	231.15	237.53	0.000914	2.93	322.23	2808.31	0.20
Reach-1	-5221	2 YEAR	198032.00	226.90	242.17	242.17	243.89	0.036173	24.66	22594.44	5276.59	1.36
Reach-1	-5221	5 YEAR	2784.00	226.90	238.53	234.75	238.57	0.000609	2.51	4468.85	3914.85	0.17
Reach-1	-5221	10 YEAR	3344.00	226.90	238.70	235.59	238.73	0.000629	2.57	5150.89	4109.27	0.17
Reach-1	-5221	25 YEAR	3957.00	226.90	238.88	238.04	238.91	0.000633	2.60	5914.39	4362.64	0.17
Reach-1	-5221	50 YEAR	4532.00	226.90	239.03	238.11	239.06	0.000641	2.63	6577.84	4496.57	0.17
Reach-1	-5221	100 YEAR	4907.00	226.90	239.12	238.18	239.15	0.000645	2.65	6989.19	4641.65	0.17
Reach-1	-5221	500 YEAR	6113.00	226.90	239.35	238.29	239.38	0.000698	2.78	8094.32	4949.66	0.18
Reach-1	-5221	SPF	8384.00	226.90	239.79	238.49	239.82	0.000689	2.85	10294.86	5055.09	0.18

An obstruction was placed above the flood event to represent the proposed fill material placed on the development from Cross-Section from Sta 130 to -2193

HEC-RAS Plan: Pro 2-5-13 River: RIVER-1 Reach: Reach-1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Reach-1	3608	1.01 YEAR	1072.00	239.40	245.47	244.00	246.09	0.010913	6.31	169.96	48.29	0.59
Reach-1	3608	2 YEAR	2113.00	239.40	253.89	246.12	253.74	0.000297	1.77	1196.74	3705.35	0.11
Reach-1	3608	5 YEAR	2931.00	239.40	250.10	247.33	250.41	0.003933	4.49	652.55	145.64	0.37
Reach-1	3608	10 YEAR	3476.00	239.40	251.02	247.76	251.32	0.003063	4.41	788.70	149.89	0.34
Reach-1	3608	25 YEAR	4097.00	239.40	251.93	248.14	252.23	0.002541	4.42	925.95	631.65	0.32
Reach-1	3608	50 YEAR	4709.00	239.40	252.73	248.47	253.04	0.002254	4.49	1048.30	1595.70	0.30
Reach-1	3608	100 YEAR	5103.00	239.40	253.87	248.67	254.14	0.001608	4.16	1225.24	3834.80	0.26
Reach-1	3608	500 YEAR	6278.00	239.40	253.88	249.25	254.27	0.002449	5.13	1222.79	3825.45	0.32
Reach-1	3608	SPF	8338.00	239.40	254.39	250.29	255.02	0.003504	6.38	1305.97	4141.58	0.39
Reach-1	3602		Bridge									
Reach-1	3596	1.01 YEAR	1072.00	239.40	245.47	244.00	246.09	0.010916	6.31	169.92	48.28	0.59
Reach-1	3596	2 YEAR	2113.00	239.40	253.86	246.12	253.70	0.000301	1.77	1191.39	3615.95	0.11
Reach-1	3596	5 YEAR	2931.00	239.40	250.07	247.33	250.39	0.004002	4.52	648.96	145.52	0.38
Reach-1	3596	10 YEAR	3476.00	239.40	251.00	247.76	251.30	0.003100	4.42	785.83	149.80	0.34
Reach-1	3596	25 YEAR	4097.00	239.40	251.91	248.14	252.22	0.002567	4.44	923.10	614.61	0.32
Reach-1	3596	50 YEAR	4709.00	239.40	252.71	248.47	253.03	0.002273	4.50	1045.51	1581.03	0.30
Reach-1	3596	100 YEAR	5103.00	239.40	253.20	248.67	253.52	0.002135	4.55	1121.10	2964.04	0.30
Reach-1	3596	500 YEAR	6278.00	239.40	253.53	249.25	253.98	0.002802	5.36	1172.34	3413.34	0.34
Reach-1	3596	SPF	8338.00	239.40	253.73	250.29	254.47	0.004555	6.93	1202.71	3748.81	0.44
Reach-1	3541	1.01 YEAR	1072.00	238.43	244.06		245.20	0.016473	8.57	125.03	38.04	0.81
Reach-1	3541	2 YEAR	2113.00	238.43	253.85		253.88	0.000186	1.63	3435.00	8085.38	0.10
Reach-1	3541	5 YEAR	2931.00	238.43	248.81		249.87	0.007824	8.25	355.33	400.27	0.81
Reach-1	3541	10 YEAR	3476.00	238.43	249.72		250.81	0.007407	8.39	414.27	1183.35	0.80
Reach-1	3541	25 YEAR	4097.00	238.43	250.58	248.02	251.74	0.007221	8.63	474.90	2907.52	0.80
Reach-1	3541	50 YEAR	4709.00	238.43	251.33		252.55	0.007048	8.87	530.77	4698.62	0.59
Reach-1	3541	100 YEAR	5103.00	238.43	251.79		253.05	0.007052	9.00	566.81	5151.02	0.60
Reach-1	3541	500 YEAR	6278.00	238.43	252.85	250.10	253.66	0.005038	7.96	1745.15	6528.09	0.51
Reach-1	3541	SPF	8338.00	238.43	253.76	251.63	254.08	0.002528	6.04	3656.87	8185.08	0.37
Reach-1	2441	1.01 YEAR	1072.00	233.86	242.34		242.45	0.000750	2.66	403.54	66.65	0.19
Reach-1	2441	2 YEAR	2113.00	233.86	253.62		253.62	0.000019	0.61	10225.88	8648.82	0.03
Reach-1	2441	5 YEAR	2931.00	233.86	248.76		247.01	0.001042	4.00	733.05	82.58	0.24
Reach-1	2441	10 YEAR	3476.00	233.86	247.47		247.77	0.001180	4.39	792.62	301.22	0.25
Reach-1	2441	25 YEAR	4097.00	233.86	248.01		248.38	0.001401	4.88	839.09	692.00	0.28
Reach-1	2441	50 YEAR	4709.00	233.86	248.43		248.88	0.001640	5.37	877.35	1518.02	0.30
Reach-1	2441	100 YEAR	5103.00	233.86	248.68		249.18	0.001792	5.67	920.41	1774.88	0.32
Reach-1	2441	500 YEAR	6278.00	233.86	249.36		250.00	0.002290	6.45	1113.23	3398.56	0.36
Reach-1	2441	SPF	8338.00	233.86	250.54	244.30	251.15	0.002721	6.72	1933.79	5517.90	0.39
Reach-1	1798	1.01 YEAR	1072.00	233.44	242.00	236.46	242.08	0.000427	2.32	461.34	71.83	0.16
Reach-1	1798	2 YEAR	2113.00	233.44	253.62	237.89	253.62	0.000000	0.10	36921.37	8699.51	0.01
Reach-1	1798	5 YEAR	2931.00	233.44	246.25	238.81	246.46	0.000678	3.66	801.23	87.95	0.21
Reach-1	1798	10 YEAR	3476.00	233.44	246.88	239.36	247.14	0.000787	4.05	857.57	823.83	0.23
Reach-1	1798	25 YEAR	4097.00	233.44	247.29	239.94	247.62	0.000972	4.58	894.90	1215.94	0.26
Reach-1	1798	50 YEAR	4709.00	233.44	247.57	240.48	247.96	0.001188	5.12	921.01	1412.01	0.29
Reach-1	1798	100 YEAR	5103.00	233.44	247.72	240.81	248.18	0.001337	5.46	955.13	1733.96	0.30
Reach-1	1798	500 YEAR	6278.00	233.44	248.07	241.73	248.70	0.001789	6.40	1124.49	2440.76	0.35
Reach-1	1798	SPF	8338.00	233.44	248.42	243.17	249.37	0.002711	7.97	1410.10	3385.82	0.44
Reach-1	1131	1.01 YEAR	1072.00	233.04	241.67		241.77	0.000516	2.51	427.09	68.55	0.18
Reach-1	1131	2 YEAR	2113.00	233.04	253.62		253.62	0.000000	0.09	44966.87	8502.96	0.00
Reach-1	1131	5 YEAR	2931.00	233.04	245.71		245.95	0.000839	4.00	737.54	111.14	0.24
Reach-1	1131	10 YEAR	3476.00	233.04	246.25		246.55	0.000980	4.42	869.99	525.72	0.26
Reach-1	1131	25 YEAR	4097.00	233.04	246.62		246.94	0.001080	4.71	1315.96	1324.70	0.27
Reach-1	1131	50 YEAR	4709.00	233.04	246.84		247.17	0.001171	4.95	1624.90	1436.18	0.28
Reach-1	1131	100 YEAR	5103.00	233.04	246.96		247.30	0.001221	5.08	1829.01	1828.96	0.29
Reach-1	1131	500 YEAR	6278.00	233.04	247.27		247.61	0.001324	5.36	2579.87	2799.31	0.30
Reach-1	1131	SPF	8338.00	233.04	247.67		247.96	0.001357	5.51	3867.41	3496.24	0.31
Reach-1	130	1.01 YEAR	945.00	232.01	241.25	235.30	241.31	0.000365	2.04	463.56	79.39	0.15
Reach-1	130	2 YEAR	198032.00	232.01	253.19	249.15	253.33	0.000565	4.17	68937.62	10910.67	0.21
Reach-1	130	5 YEAR	2784.00	232.01	244.95	237.97	245.09	0.000784	3.10	941.37	780.66	0.22
Reach-1	130	10 YEAR	3344.00	232.01	245.39	238.58	245.56	0.000883	3.36	1244.40	2317.12	0.24
Reach-1	130	25 YEAR	3957.00	232.01	245.73	239.19	245.90	0.000899	3.48	1828.61	3477.94	0.24
Reach-1	130	50 YEAR	4532.00	232.01	245.92	239.71	246.08	0.000928	3.58	2300.11	3893.86	0.24
Reach-1	130	100 YEAR	4907.00	232.01	246.02	240.04	246.19	0.000947	3.64	2567.86	4206.03	0.25
Reach-1	130	500 YEAR	6113.00	232.01	246.27	241.06	246.43	0.001029	3.84	3345.75	4967.60	0.26
Reach-1	130	SPF	8384.00	232.01	246.67	243.10	246.81	0.001039	3.94	5102.69	6270.56	0.26
Reach-1	90		Bridge									
Reach-1	0	1.01 YEAR	945.00	231.57	241.15		241.23	0.000444	2.25	420.92	71.33	0.16
Reach-1	0	2 YEAR	198032.00	231.57	253.11		253.25	0.000517	4.17	67380.42	9783.99	0.20
Reach-1	0	5 YEAR	2784.00	231.57	244.71		244.90	0.001037	3.54	818.09	506.47	0.25
Reach-1	0	10 YEAR	3344.00	231.57	245.16		245.37	0.001100	3.76	1222.92	1856.65	0.26
Reach-1	0	25 YEAR	3957.00	231.57	245.50		245.69	0.001081	3.80	1759.27	2672.11	0.26
Reach-1	0	50 YEAR	4532.00	231.57	245.70		245.88	0.001057	3.81	2312.94	3493.74	0.26
Reach-1	0	100 YEAR	4907.00	231.57	245.81		245.98	0.001042	3.81	2676.01	4219.88	0.26

HEC-RAS Plan: Pro 2-5-13 River: RIVER-1 Reach: Reach-1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Reach-1	0	500 YEAR	6113.00	231.57	246.08		246.22	0.001012	3.81	3651.81	5448.98	0.26
Reach-1	0	SPF	8384.00	231.57	246.42		246.55	0.001105	4.06	5162.65	6692.46	0.27
Reach-1	-561	1.01 YEAR	945.00	230.60	240.83		240.94	0.000567	2.64	357.70	2136.99	0.18
Reach-1	-561	2 YEAR	198032.00	230.60	252.46		252.69	0.001189	6.17	53109.67	10082.39	0.30
Reach-1	-561	5 YEAR	2784.00	230.60	243.70		244.09	0.001745	5.06	624.03	4536.27	0.33
Reach-1	-561	10 YEAR	3344.00	230.60	244.02	238.87	244.48	0.002047	5.51	795.49	4778.97	0.36
Reach-1	-561	25 YEAR	3957.00	230.60	244.31	239.58	244.74	0.002183	5.71	1065.75	5183.48	0.37
Reach-1	-561	50 YEAR	4532.00	230.60	244.52	240.20	244.92	0.002216	5.75	1305.79	5339.40	0.37
Reach-1	-561	100 YEAR	4907.00	230.60	244.64	240.59	245.02	0.002214	5.74	1469.15	5600.59	0.37
Reach-1	-561	500 YEAR	6113.00	230.60	244.97	241.71	245.28	0.002103	5.60	2148.47	6637.20	0.36
Reach-1	-561	SPF	8384.00	230.60	245.42		245.64	0.001792	5.18	3628.00	7694.97	0.34
Reach-1	-1421	1.01 YEAR	945.00	230.65	240.41		240.50	0.000455	2.39	395.37	3270.61	0.17
Reach-1	-1421	2 YEAR	198032.00	230.65	251.71		251.91	0.000748	4.95	58734.97	9761.07	0.24
Reach-1	-1421	5 YEAR	2784.00	230.65	242.80		242.98	0.000895	3.80	1220.05	4845.36	0.24
Reach-1	-1421	10 YEAR	3344.00	230.65	243.08		243.24	0.000907	3.86	1519.71	4984.22	0.24
Reach-1	-1421	25 YEAR	3957.00	230.65	243.34		243.49	0.000902	3.89	1847.14	5143.29	0.24
Reach-1	-1421	50 YEAR	4532.00	230.65	243.51		243.65	0.000908	3.93	2080.72	5191.26	0.24
Reach-1	-1421	100 YEAR	4907.00	230.65	243.62		243.75	0.000915	3.96	2221.06	5216.42	0.24
Reach-1	-1421	500 YEAR	6113.00	230.65	243.92		244.05	0.000927	4.03	2649.56	5306.46	0.24
Reach-1	-1421	SPF	8384.00	230.65	244.38		244.51	0.000932	4.11	3599.52	6615.10	0.25
Reach-1	-2193	1.01 YEAR	945.00	230.86	240.03		240.12	0.000529	2.43	389.56	3829.20	0.18
Reach-1	-2193	2 YEAR	198032.00	230.86	251.20		251.38	0.000629	4.78	60099.15	9253.51	0.22
Reach-1	-2193	5 YEAR	2784.00	230.86	242.01		242.19	0.001138	3.95	1127.40	5032.45	0.27
Reach-1	-2193	10 YEAR	3344.00	230.86	242.25		242.43	0.001193	4.08	1375.37	5158.35	0.27
Reach-1	-2193	25 YEAR	3957.00	230.86	242.49		242.67	0.001248	4.20	1648.53	5352.06	0.28
Reach-1	-2193	50 YEAR	4532.00	230.86	242.67		242.84	0.001220	4.18	1889.36	5379.39	0.28
Reach-1	-2193	100 YEAR	4907.00	230.86	242.78		242.94	0.001209	4.18	2027.10	5383.23	0.28
Reach-1	-2193	500 YEAR	6113.00	230.86	243.09		243.24	0.001172	4.16	2440.46	5408.35	0.27
Reach-1	-2193	SPF	8384.00	230.86	243.55		243.70	0.001176	4.23	3174.65	6011.53	0.28
Reach-1	-3045	1.01 YEAR	945.00	231.00	239.43		239.56	0.000827	2.89	326.44	4231.72	0.22
Reach-1	-3045	2 YEAR	198032.00	231.00	250.60		250.78	0.000825	5.22	60206.37	8313.07	0.25
Reach-1	-3045	5 YEAR	2784.00	231.00	241.33		241.40	0.000702	3.04	1989.05	5575.97	0.21
Reach-1	-3045	10 YEAR	3344.00	231.00	241.51		241.59	0.000758	3.20	2261.38	5837.85	0.22
Reach-1	-3045	25 YEAR	3957.00	231.00	241.73		241.80	0.000767	3.26	2630.75	6051.55	0.22
Reach-1	-3045	50 YEAR	4532.00	231.00	241.90		241.98	0.000782	3.32	2969.45	6354.53	0.22
Reach-1	-3045	100 YEAR	4907.00	231.00	242.00		242.08	0.000785	3.35	3191.47	6367.93	0.22
Reach-1	-3045	500 YEAR	6113.00	231.00	242.32		242.39	0.000798	3.37	3891.86	6896.39	0.22
Reach-1	-3045	SPF	8384.00	231.00	242.77		242.84	0.000819	3.41	5038.85	6866.21	0.23
Reach-1	-4001	1.01 YEAR	945.00	229.86	238.60		238.73	0.000908	2.98	317.31	4594.80	0.23
Reach-1	-4001	2 YEAR	198032.00	229.86	249.46		249.73	0.001584	7.08	50367.34	9030.69	0.35
Reach-1	-4001	5 YEAR	2784.00	229.86	240.71	237.14	240.77	0.000615	2.83	2260.43	7116.11	0.19
Reach-1	-4001	10 YEAR	3344.00	229.86	240.77		240.85	0.000793	3.23	2374.42	7131.28	0.22
Reach-1	-4001	25 YEAR	3957.00	229.86	240.96		241.05	0.000813	3.20	2735.54	7180.82	0.22
Reach-1	-4001	50 YEAR	4532.00	229.86	241.13		241.21	0.000828	3.28	3020.69	7215.33	0.23
Reach-1	-4001	100 YEAR	4907.00	229.86	241.23		241.30	0.000840	3.33	3199.89	7250.85	0.23
Reach-1	-4001	500 YEAR	6113.00	229.86	241.52		241.59	0.000872	3.47	3759.89	7472.10	0.23
Reach-1	-4001	SPF	8384.00	229.86	241.90		241.99	0.000977	3.79	4649.19	7927.40	0.25
Reach-1	-4661	1.01 YEAR	945.00	229.17	237.93		238.09	0.001047	3.25	291.12	4734.94	0.24
Reach-1	-4661	2 YEAR	198032.00	229.17	247.81		248.28	0.003191	9.41	39437.86	8502.59	0.49
Reach-1	-4661	5 YEAR	2784.00	229.17	238.57	236.60	239.70	0.006799	8.53	326.36	5323.68	0.63
Reach-1	-4661	10 YEAR	3344.00	229.17	239.44	239.44	239.87	0.003317	6.18	1161.91	6736.90	0.44
Reach-1	-4661	25 YEAR	3957.00	229.17	239.56	239.56	240.01	0.003730	6.59	1315.62	6765.14	0.47
Reach-1	-4661	50 YEAR	4532.00	229.17	239.67	239.67	240.12	0.004027	6.87	1453.93	6795.78	0.49
Reach-1	-4661	100 YEAR	4907.00	229.17	239.73	239.73	240.19	0.004241	7.07	1531.55	6798.37	0.50
Reach-1	-4661	500 YEAR	6113.00	229.17	239.88	239.88	240.39	0.005021	7.74	1732.71	6805.05	0.55
Reach-1	-4661	SPF	8384.00	229.17	240.32		240.73	0.004619	7.55	2360.03	7204.12	0.53
Reach-1	-5221	1.01 YEAR	945.00	226.90	237.40	231.15	237.53	0.000914	2.93	322.23	2806.31	0.20
Reach-1	-5221	2 YEAR	198032.00	226.90	242.17	242.17	243.89	0.036173	24.65	22594.44	5276.59	1.36
Reach-1	-5221	5 YEAR	2784.00	226.90	238.53	234.75	238.57	0.000609	2.51	4468.85	3914.85	0.17
Reach-1	-5221	10 YEAR	3344.00	226.90	238.70	235.59	238.73	0.000629	2.57	5150.89	4109.27	0.17
Reach-1	-5221	25 YEAR	3957.00	226.90	238.88	238.04	238.91	0.000633	2.60	5914.39	4362.64	0.17
Reach-1	-5221	50 YEAR	4532.00	226.90	239.03	238.11	239.06	0.000641	2.63	6577.64	4496.57	0.17
Reach-1	-5221	100 YEAR	4907.00	226.90	239.12	238.16	239.15	0.000645	2.65	6969.19	4641.65	0.17
Reach-1	-5221	500 YEAR	6113.00	226.90	239.35	238.29	239.38	0.000698	2.78	8094.32	4949.66	0.18
Reach-1	-5221	SPF	8384.00	226.90	239.79	238.49	239.82	0.000689	2.85	10294.86	5055.09	0.18

HEC-RAS Summary Results

OLD COE SECTIONS

River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)
3608	1.01 YEAR	1072	239.4	248.42	2.47	433.33	123.21
3608	2 YEAR	2113	239.4	250.88	2.75	767.4	149.24
3608	5 YEAR	2931	239.4	251.96	3.15	931.37	664.17
3608	10 YEAR	3476	239.4	252.45	3.46	1005.11	1278.68
3608	25 YEAR	4097	239.4	252.84	3.85	1064.88	1710.69
3608	50 YEAR	4709	239.4	253.2	4.2	1120.16	2945.34
3608	100 YEAR	5103	239.4	253.88	4.16	1225.93	3837.45
3608	500 YEAR	6278	239.4	254.32	4.85	1295.04	4100.15
3608	SPF	8338	239.4	255.63	2.71	7384.06	4584.86
3602	Bridge						
3596	1.01 YEAR	1072	239.4	248.41	2.48	432.84	123.2
3596	2 YEAR	2113	239.4	250.87	2.76	766.68	149.21
3596	5 YEAR	2931	239.4	251.96	3.15	930.39	658.27
3596	10 YEAR	3476	239.4	252.44	3.46	1003.85	1267.9
3596	25 YEAR	4097	239.4	252.83	3.85	1063.18	1693.48
3596	50 YEAR	4709	239.4	253.18	4.21	1117.98	2894.98
3596	100 YEAR	5103	239.4	253.39	4.44	1149.94	3279.26
3596	500 YEAR	6278	239.4	253.95	5.07	1237.34	3880.93
3596	SPF	8338	239.4	254.68	6.17	1351.93	4302
1221	1.01 YEAR	1072	231.9	244.61	3.04	352.91	64.01
1221	2 YEAR	2113	231.9	247.13	3.96	560.01	288.04
1221	5 YEAR	2931	231.9	247.83	4.6	1125.04	1449.52
1221	10 YEAR	3476	231.9	248.16	4.74	1722.42	2202.46
1221	25 YEAR	4097	231.9	248.45	4.72	2411.92	2525.75
1221	50 YEAR	4709	231.9	248.67	4.74	2985.16	2699.19
1221	100 YEAR	5103	231.9	248.79	4.73	3315.26	2723.96
1221	500 YEAR	6278	231.9	249.13	4.73	4296.33	3196.45
1221	SPF	8338	231.9	249.6	4.7	5884.49	3420.22
241	1.01 YEAR	945	232.1	243.46	2.76	341.88	56.16
241	2 YEAR	1980	232.1	245.99	2.94	1537.72	1201.35
241	5 YEAR	2784	232.1	246.57	3.18	2389.83	1725.52
241	10 YEAR	3344	232.1	246.88	3.3	2972.71	2106.88
241	25 YEAR	3957	232.1	247.15	3.47	3603.74	2595.9
241	50 YEAR	4532	232.1	247.37	3.53	4197.8	2753.83
241	100 YEAR	4907	232.1	247.51	3.55	4586.56	2852.45
241	500 YEAR	6113	232.1	247.87	3.69	5645.45	3105.23
241	SPF	8384	232.1	248.37	3.88	7251.13	3273.26

NEW BA SECTIONS

River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)
3608	1.01 YEAR	1072	239.4	245.47	6.31	169.96	48.29
3608	2 YEAR	2113	239.4	253.4	1.83	1152.14	3298.55
3608	5 YEAR	2931	239.4	250.1	4.49	652.55	145.64
3608	10 YEAR	3476	239.4	251.02	4.41	788.7	149.89
3608	25 YEAR	4097	239.4	251.93	4.42	925.95	631.65
3608	50 YEAR	4709	239.4	252.73	4.49	1048.3	1595.7
3608	100 YEAR	5103	239.4	253.87	4.16	1225.24	3834.8
3608	500 YEAR	6278	239.4	253.86	5.13	1222.79	3825.46
3608	SPF	8338	239.4	254.39	6.38	1306.05	4141.89
3602	Bridge						
3596	1.01 YEAR	1072	239.4	245.47	6.31	169.92	48.28
3596	2 YEAR	2113	239.4	253.4	1.83	1151.92	3297.27
3596	5 YEAR	2931	239.4	250.07	4.52	648.96	145.52
3596	10 YEAR	3476	239.4	251	4.42	785.63	149.8
3596	25 YEAR	4097	239.4	251.91	4.44	923.1	614.61
3596	50 YEAR	4709	239.4	252.71	4.5	1045.51	1581.03
3596	100 YEAR	5103	239.4	253.2	4.55	1121.1	2964.04
3596	500 YEAR	6278	239.4	253.53	5.36	1172.34	3413.35
3596	SPF	8338	239.4	253.73	6.93	1202.78	3749.09
3541	1.01 YEAR	1072	238.43	244.06	8.57	125.03	36.04
3541	2 YEAR	2113	238.43	253.39	1.9	2887.76	7697.4
3541	5 YEAR	2931	238.43	248.81	8.25	355.33	400.27
3541	10 YEAR	3476	238.43	249.72	8.39	414.27	1183.35
3541	25 YEAR	4097	238.43	250.58	8.63	474.9	2907.52
3541	50 YEAR	4709	238.43	251.33	8.87	530.77	4698.62
3541	100 YEAR	5103	238.43	251.79	9	566.81	5151.02
3541	500 YEAR	6278	238.43	252.85	7.96	1745.12	6528.06
3541	SPF	8338	238.43	253.76	6.04	3658.34	8185.34
2441	1.01 YEAR	1072	233.86	242.34	2.66	403.54	66.65
2441	2 YEAR	2113	233.86	253.34	0.73	8298.55	8634.42
2441	5 YEAR	2931	233.86	246.76	4	733.05	82.58
2441	10 YEAR	3476	233.86	247.47	4.39	792.62	301.22
2441	25 YEAR	4097	233.86	248.01	4.88	839.09	691.98
2441	50 YEAR	4709	233.86	248.43	5.37	877.34	1517.91
2441	100 YEAR	5103	233.86	248.68	5.67	920.41	1774.67
2441	500 YEAR	6278	233.86	249.36	6.45	1113.2	3398.43
2441	SPF	8338	233.86	250.53	6.74	1925.42	5504.43
1798	1.01 YEAR	1072	233.44	242	2.32	461.34	71.83
1798	2 YEAR	2113	233.44	253.34	0.11	34882.55	8666.92
1798	5 YEAR	2931	233.44	246.25	3.66	801.23	87.95
1798	10 YEAR	3476	233.44	246.88	4.05	857.57	823.83
1798	25 YEAR	4097	233.44	247.29	4.58	894.9	1215.92
1798	50 YEAR	4709	233.44	247.57	5.12	921.01	1411.95
1798	100 YEAR	5103	233.44	247.72	5.46	955.12	1733.94
1798	500 YEAR	6278	233.44	248.07	6.4	1124.45	2440.54
1798	SPF	8338	233.44	248.42	7.96	1407.87	3383.95
1131	1.01 YEAR	1072	233.04	241.67	2.51	427.09	68.55
1131	2 YEAR	2113	233.04	253.34	0.09	42613.37	8494.9
1131	5 YEAR	2931	233.04	245.71	4	737.54	111.14
1131	10 YEAR	3476	233.04	246.25	4.42	869.99	525.72
1131	25 YEAR	4097	233.04	246.62	4.71	1315.87	1324.69
1131	50 YEAR	4709	233.04	246.84	4.95	1624.73	1436.06
1131	100 YEAR	5103	233.04	246.96	5.09	1828.79	1828.63
1131	500 YEAR	6278	233.04	247.28	5.36	2582.39	2800.87
1131	SPF	8338	233.04	247.68	5.5	3880.97	3499.43

PROPOSED SECTIONS

River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Differential
3608	1.01 YEAR	1072	239.4	245.47	6.31	169.96	48.29	0
3608	2 YEAR	2113	239.4	253.69	1.77	1196.74	3705.35	-0.29
3608	5 YEAR	2931	239.4	250.1	4.49	652.55	145.64	0
3608	10 YEAR	3476	239.4	251.02	4.41	788.7	149.89	0
3608	25 YEAR	4097	239.4	251.93	4.42	925.95	631.65	0
3608	50 YEAR	4709	239.4	252.73	4.49	1048.3	1595.7	0
3608	100 YEAR	5103	239.4	253.87	4.16	1225.24	3834.8	0
3608	500 YEAR	6278	239.4	253.86	5.13	1222.79	3825.45	0
3608	SPF	8338	239.4	254.39	6.38	1305.97	4141.58	0
3602	Bridge							
3596	1.01 YEAR	1072	239.4	245.47	6.31	169.92	48.28	0
3596	2 YEAR	2113	239.4	253.66	1.77	1191.39	3615.95	-0.26
3596	5 YEAR	2931	239.4	250.07	4.52	648.96	145.52	0
3596	10 YEAR	3476	239.4	251	4.42	785.63	149.8	0
3596	25 YEAR	4097	239.4	251.91	4.44	923.1	614.61	0
3596	50 YEAR	4709	239.4	252.71	4.5	1045.51	1581.03	0
3596	100 YEAR	5103	239.4	253.2	4.55	1121.1	2964.04	0
3596	500 YEAR	6278	239.4	253.53	5.36	1172.34	3413.34	0
3596	SPF	8338	239.4	253.73	6.93	1202.71	3748.81	0
3541	1.01 YEAR	1072	238.43	244.06	8.57	125.03	36.04	0
3541	2 YEAR	2113	238.43	253.65	1.63	3435	8085.38	-0.26
3541	5 YEAR	2931	238.43	248.81	8.25	355.33	400.27	0
3541	10 YEAR	3476	238.43	249.72	8.39	414.27	1183.35	0
3541	25 YEAR	4097	238.43	250.58	8.63	474.9	2907.52	0
3541	50 YEAR	4709	238.43	251.33	8.87	530.77	4698.62	0
3541	100 YEAR	5103	238.43	251.79	9	566.81	5151.02	0
3541	500 YEAR	6278	238.43	252.85	7.96	1745.15	6528.09	0
3541	SPF	8338	238.43	253.76	6.04	3656.87	8185.08	0
2441	1.01 YEAR	1072	233.86	242.34	2.66	403.54	66.65	0
2441	2 YEAR	2113	233.86	253.62	0.61	10225.68	8648.82	-0.28
2441	5 YEAR	2931	233.86	246.76	4	733.05	82.58	0
2441	10 YEAR	3476	233.86	247.47	4.39	792.62	301.22	0
2441	25 YEAR	4097	233.86	248.01	4.88	839.09	692	0
2441	50 YEAR	4709	233.86	248.43	5.37	877.35	1518.02	0
2441	100 YEAR	5103	233.86	248.68	5.67	920.41	1774.68	0
2441	500 YEAR	6278	233.86	249.36	6.45	1113.23	3398.56	0
2441	SPF	8338	233.86	250.54	6.72	1933.79	5517.9	-0.01
1798	1.01 YEAR	1072	233.44	242	2.32	461.34	71.83	0
1798	2 YEAR	2113	233.44	253.62	0.1	36921.37	8699.51	-0.28
1798	5 YEAR	2931	233.44	246.25	3.66	801.23	87.95	0
1798	10 YEAR	3476	233.44	246.88	4.05	857.57	823.83	0
1798	25 YEAR	4097	233.44	247.29	4.58	894.9	1215.94	0
1798	50 YEAR	4709	233.44	247.57	5.12	921.01	1412.01	0
1798	100 YEAR	5103	233.44	247.72	5.46	955.13	1733.96	0
1798	500 YEAR	6278	233.44	248.07	6.4	1124.49	2440.76	0
1798	SPF	8338	233.44	248.42	7.97	1410.1	3385.82	0
1131	1.01 YEAR	1072	233.04	241.67	2.51	427.09	68.55	0
1131	2 YEAR	2113	233.04	253.62	0.09	44966.87	8502.96	-0.28
1131	5 YEAR	2931	233.04	245.71	4	737.54	111.14	0
1131	10 YEAR	3476	233.04	246.25	4.42	869.99	525.72	0
1131	25 YEAR	4097	233.04	246.62	4.71	1315.96	1324.7	0
1131	50 YEAR	4709	233.04	246.84	4.95	1624.9	1436.18	0
1131	100 YEAR	5103	233.04	246.96	5.08	1829.01	1828.96	0
1131	500 YEAR	6278	233.04	247.27	5.36	2579.87	2799.31	0.01
1131	SPF	8338	233.04	247.67	5.51	3867.41	3496.24	0.01

17 1.01 YEAR	945	232.1	243.24	2.87	329.33	54.79
17 2 YEAR	1980	232.1	245.68	3.34	1221.21	912.01
17 5 YEAR	2784	232.1	246.16	3.85	1750.26	1378.15
17 10 YEAR	3344	232.1	246.43	4.07	2161.41	1616.58
17 25 YEAR	3957	232.1	246.66	4.3	2561.52	1792.69
17 50 YEAR	4532	232.1	246.86	4.5	2936.23	2073.42
17 100 YEAR	4907	232.1	246.98	4.66	3196.56	2249.98
17 500 YEAR	6113	232.1	247.3	4.94	4007.01	2704.11
17 SPF	8384	232.1	247.77	5.31	5349.99	3036.82
8.5 Bridge						
0 1.01 YEAR	945	232.1	243.18	2.9	326.17	54.43
0 2 YEAR	1980	232.1	245.62	3.41	1167.37	881.63
0 5 YEAR	2784	232.1	246.14	3.88	1726.7	1359.8
0 10 YEAR	3344	232.1	246.41	4.1	2135.72	1602.81
0 25 YEAR	3957	232.1	246.65	4.34	2533.59	1782.27
0 50 YEAR	4532	232.1	246.85	4.53	2905.34	2044.68
0 100 YEAR	4907	232.1	246.97	4.69	3163.7	2231.65
0 500 YEAR	6113	232.1	247.29	4.98	3964.55	2692.93
0 SPF	8384	232.1	247.75	5.36	5299.68	3025.01
-799 1.01 YEAR	945	231.4	242.15	3.37	282.84	78.37
-799 2 YEAR	1980	231.4	244.19	4.46	1081.87	2408.92
-799 5 YEAR	2784	231.4	244.5	4.79	1837.74	2513.19
-799 10 YEAR	3344	231.4	244.67	4.97	2260.99	2630.12
-799 25 YEAR	3957	231.4	244.83	5.08	2699.84	2708
-799 50 YEAR	4532	231.4	244.96	5.2	3046.2	2751.07
-799 100 YEAR	4907	231.4	245.04	5.25	3273.14	2772.36
-799 500 YEAR	6113	231.4	245.26	5.43	3891.66	2810.63
-799 SPF	8384	231.4	245.64	5.61	4972.48	2879.73
-3167 1.01 YEAR	945	229.1	239.4	3.02	333.71	229.27
-3167 2 YEAR	1980	229.1	240.03	3.83	1983.02	3327.25
-3167 5 YEAR	2784	229.1	240.35	3.73	3061.42	3526.02
-3167 10 YEAR	3344	229.1	240.53	3.68	3719.71	3676.42
-3167 25 YEAR	3957	229.1	240.7	3.67	4358.96	3882.6
-3167 50 YEAR	4532	229.1	240.85	3.64	4955.68	4054.57
-3167 100 YEAR	4907	229.1	240.94	3.64	5317.58	4170.41
-3167 500 YEAR	6113	229.1	241.22	3.58	6520.41	4474.58
-3167 SPF	8384	229.1	241.63	3.6	8503.81	4964.22

130 1.01 YEAR	945	232.01	241.25	2.04	463.56	79.39
130 2 YEAR	198032	232.01	252.86	4.4	66160.21	10910.67
130 5 YEAR	2784	232.01	244.95	3.1	941.37	780.66
130 10 YEAR	3344	232.01	245.39	3.38	1244.4	2317.12
130 25 YEAR	3957	232.01	245.73	3.48	1827.97	3477.35
130 50 YEAR	4532	232.01	245.92	3.58	2297.19	3890.88
130 100 YEAR	4907	232.01	246.02	3.64	2561.27	4192.41
130 500 YEAR	6113	232.01	246.26	3.88	3284.64	4928.92
130 SPF	8384	232.01	246.59	4.2	4693.29	5960.26
90 Bridge						
0 1.01 YEAR	945	231.57	241.15	2.25	420.92	71.33
0 2 YEAR	198032	231.57	252.76	4.35	65241.62	9783.99
0 5 YEAR	2784	231.57	244.71	3.54	818.09	506.47
0 10 YEAR	3344	231.57	245.16	3.76	1222.92	1856.65
0 25 YEAR	3957	231.57	245.49	3.8	1758.46	2670.7
0 50 YEAR	4532	231.57	245.7	3.82	2306.88	3486.53
0 100 YEAR	4907	231.57	245.81	3.82	2659.77	4209.83
0 500 YEAR	6113	231.57	246.05	3.9	3542.28	5349.44
0 SPF	8384	231.57	246.34	4.19	4817.2	6739.93
-561 1.01 YEAR	945	230.6	240.83	2.64	357.7	2136.99
-561 2 YEAR	198032	230.6	252.22	5.39	57413.98	10082.39
-561 5 YEAR	2784	230.6	243.7	5.06	624.03	4536.27
-561 10 YEAR	3344	230.6	244.02	5.51	795.49	4778.99
-561 25 YEAR	3957	230.6	244.31	5.71	1067.76	5200.71
-561 50 YEAR	4532	230.6	244.51	5.74	1317.71	5437.14
-561 100 YEAR	4907	230.6	244.64	5.73	1504.5	5968.31
-561 500 YEAR	6113	230.6	244.96	5.51	2341.43	7366.96
-561 SPF	8384	230.6	245.38	5.05	4122.26	8952.33
-1421 1.01 YEAR	945	230.65	240.41	2.39	395.37	3270.61
-1421 2 YEAR	198032	230.65	251.63	4.52	63216.13	9761.07
-1421 5 YEAR	2784	230.65	242.8	3.8	1220.05	4845.36
-1421 10 YEAR	3344	230.65	243.08	3.86	1519.71	4984.22
-1421 25 YEAR	3957	230.65	243.34	3.89	1849.14	5155.87
-1421 50 YEAR	4532	230.65	243.51	3.93	2085.1	5206.86
-1421 100 YEAR	4907	230.65	243.62	3.96	2227.01	5233.78
-1421 500 YEAR	6113	230.65	243.91	4.02	2671.57	5542.42
-1421 SPF	8384	230.65	244.36	4.09	3943.84	7904.67
-2193 1.01 YEAR	945	230.86	240.03	2.43	389.56	3829.2
-2193 2 YEAR	198032	230.86	251.18	4.51	62663.48	9253.51
-2193 5 YEAR	2784	230.86	242.01	3.95	1127.4	5032.45
-2193 10 YEAR	3344	230.86	242.25	4.08	1375.37	5158.35
-2193 25 YEAR	3957	230.86	242.49	4.2	1648.53	5352.06
-2193 50 YEAR	4532	230.86	242.67	4.18	1889.36	5379.39
-2193 100 YEAR	4907	230.86	242.78	4.18	2027.1	5383.23
-2193 500 YEAR	6113	230.86	243.09	4.15	2452.31	5617.56
-2193 SPF	8384	230.86	243.54	4.17	3460.66	6830.58
-3045 1.01 YEAR	945	231	239.43	2.89	326.44	4231.72
-3045 2 YEAR	198032	231	250.6	5.22	60206.37	8313.07
-3045 5 YEAR	2784	231	241.33	3.04	1989.05	5575.97
-3045 10 YEAR	3344	231	241.51	3.2	2261.38	5837.85
-3045 25 YEAR	3957	231	241.73	3.26	2630.75	6051.55
-3045 50 YEAR	4532	231	241.9	3.32	2969.45	6354.53
-3045 100 YEAR	4907	231	242	3.35	3191.47	6367.93
-3045 500 YEAR	6113	231	242.32	3.37	3891.86	6696.39
-3045 SPF	8384	231	242.77	3.41	5038.85	6866.21
-4001 1.01 YEAR	945	229.86	238.6	2.98	317.31	4594.8
-4001 2 YEAR	198032	229.86	249.46	7.08	50367.34	9030.69
-4001 5 YEAR	2784	229.86	240.71	2.83	2260.43	7116.11
-4001 10 YEAR	3344	229.86	240.77	3.23	2374.42	7131.28
-4001 25 YEAR	3957	229.86	240.98	3.2	2735.54	7180.82

130 1.01 YEAR	945	232.01	241.25	2.04	463.56	79.39	0
130 2 YEAR	198032	232.01	253.19	4.17	68937.62	10910.67	-0.33
130 5 YEAR	2784	232.01	244.95	3.1	941.37	780.66	0
130 10 YEAR	3344	232.01	245.39	3.38	1244.4	2317.12	0
130 25 YEAR	3957	232.01	245.73	3.48	1828.61	3477.94	0
130 50 YEAR	4532	232.01	245.92	3.58	2300.11	3893.86	0
130 100 YEAR	4907	232.01	246.02	3.64	2567.86	4206.03	0
130 500 YEAR	6113	232.01	246.27	3.84	3345.75	4967.6	-0.01
130 SPF	8384	232.01	246.67	3.94	5102.69	6270.56	-0.08
90 Bridge							
0 1.01 YEAR	945	231.57	241.15	2.25	420.92	71.33	0
0 2 YEAR	198032	231.57	253.11	4.17	67380.42	9783.99	-0.35
0 5 YEAR	2784	231.57	244.71	3.54	818.09	506.47	0
0 10 YEAR	3344	231.57	245.16	3.76	1222.92	1856.65	0
0 25 YEAR	3957	231.57	245.5	3.8	1759.27	2672.11	-0.01
0 50 YEAR	4532	231.57	245.7	3.81	2312.94	3493.74	0
0 100 YEAR	4907	231.57	245.81	3.81	2676.01	4219.88	0
0 500 YEAR	6113	231.57	246.08	3.81	3651.61	5448.98	-0.03
0 SPF	8384	231.57	246.42	4.06	5162.65	6692.46	-0.08
-561 1.01 YEAR	945	230.6	240.83	2.64	357.7	2136.99	0
-561 2 YEAR	198032	230.6	252.46	6.17	53109.67	10082.39	-0.24
-561 5 YEAR	2784	230.6	243.7	5.06	624.03	4536.27	0
-561 10 YEAR	3344	230.6	244.02	5.51	795.49	4778.97	0
-561 25 YEAR	3957	230.6	244.31	5.71	1065.75	5183.48	0
-561 50 YEAR	4532	230.6	244.52	5.75	1305.79	5339.4	-0.01
-561 100 YEAR	4907	230.6	244.64	5.74	1469.15	5600.59	0
-561 500 YEAR	6113	230.6	244.97	5.6	2148.47	6637.2	-0.01
-561 SPF	8384	230.6	245.42	5.18	3628	7694.97	-0.04
-1421 1.01 YEAR	945	230.65	240.41	2.39	395.37	3270.61	0
-1421 2 YEAR	198032	230.65	251.71	4.95	58734.97	9761.07	-0.08
-1421 5 YEAR	2784	230.65	242.8	3.8	1220.05	4845.36	0
-1421 10 YEAR	3344	230.65	243.08	3.86	1519.71	4984.22	0
-1421 25 YEAR	3957	230.65	243.34	3.89	1847.14	5143.29	0
-1421 50 YEAR	4532	230.65	243.51	3.93	2080.72	5191.26	0
-1421 100 YEAR	4907	230.65	243.62	3.96	2221.06	5216.42	0
-1421 500 YEAR	6113	230.65	243.92	4.03	2649.56	5308.46	-0.01
-1421 SPF	8384	230.65	244.38	4.11	3599.52	6615.1	-0.02
-2193 1.01 YEAR	945	230.86	240.03	2.43	389.56	3829.2	0
-2193 2 YEAR	198032	230.86	251.2	4.78	60099.15	9253.51	-0.02
-2193 5 YEAR	2784	230.86	242.01	3.95	1127.4	5032.45	0
-2193 10 YEAR	3344	230.86	242.25	4.08	1375.37	5158.35	0
-2193 25 YEAR	3957	230.86	242.49	4.2	1648.53	5352.06	0
-2193 50 YEAR	4532	230.86	242.67	4.18	1889.36	5379.39	0
-2193 100 YEAR	4907	230.86	242.78	4.18	2027.1	5383.23	0
-2193 500 YEAR	6113	230.86	243.09	4.16	2440.46	5406.35	0
-2193 SPF	8384	230.86	243.55	4.23	3174.65	6011.53	-0.01
-3045 1.01 YEAR	945	231	239.43	2.89	326.44	4231.72	0
-3045 2 YEAR	198032	231	250.6	5.22	60206.37	8313.07	0
-3045 5 YEAR	2784	231	241.33	3.04	1989.05	5575.97	0
-3045 10 YEAR	3344	231	241.51	3.2	2261.38	5837.85	0
-3045 25 YEAR	3957	231	241.73	3.26	2630.75	6051.55	0
-3045 50 YEAR	4532	231	241.9	3.32	2969.45	6354.53	0
-3045 100 YEAR	4907	231	242	3.35	3191.47	6367.93	0
-3045 500 YEAR	6113	231	242.32	3.37	3891.86	6696.39	0
-3045 SPF	8384	231	242.77	3.41	5038.85	6866.21	0
-4001 1.01 YEAR	945	229.86	238.6	2.98	317.31	4594.8	0
-4001 2 YEAR	198032	229.86	249.46	7.08	50367.34	9030.69	0
-4001 5 YEAR	2784	229.86	240.71	2.83	2260.43	7116.11	0
-4001 10 YEAR	3344	229.86	240.77	3.23	2374.42	7131.28	0
-4001 25 YEAR	3957	229.86	240.98	3.2	2735.54	7180.82	0

-5221 1.01 YEAR	945	226.9	237.4	2.93	322.23	2806.31
-5221 2 YEAR	1980	226.9	238.22	2.46	3311.32	3575.86
-5221 5 YEAR	2784	226.9	238.53	2.51	4468.85	3914.85
-5221 10 YEAR	3344	226.9	238.7	2.57	5150.89	4109.27
-5221 25 YEAR	3957	226.9	238.88	2.6	5914.39	4362.64
-5221 50 YEAR	4532	226.9	239.03	2.63	6577.64	4496.57
-5221 100 YEAR	4907	226.9	239.12	2.65	6989.19	4641.65
-5221 500 YEAR	6113	226.9	239.35	2.78	8094.32	4949.66
-5221 SPF	8384	226.9	239.79	2.85	10294.86	5055.09

-4001 50 YEAR	4532	229.86	241.13	3.28	3020.69	7215.33
-4001 100 YEAR	4907	229.86	241.23	3.33	3199.89	7250.85
-4001 500 YEAR	6113	229.86	241.52	3.47	3759.89	7472.1
-4001 SPF	8384	229.86	241.9	3.79	4649.19	7927.4
-4661 1.01 YEAR	945	229.17	237.93	3.25	291.12	4734.94
-4661 2 YEAR	198032	229.17	247.81	9.41	39437.86	8502.59
-4661 5 YEAR	2784	229.17	238.57	8.53	326.36	5323.68
-4661 10 YEAR	3344	229.17	239.44	6.18	1161.91	6736.9
-4661 25 YEAR	3957	229.17	239.56	6.59	1315.62	6765.14
-4661 50 YEAR	4532	229.17	239.67	6.87	1453.93	6795.78
-4661 100 YEAR	4907	229.17	239.73	7.07	1531.55	6798.37
-4661 500 YEAR	6113	229.17	239.88	7.74	1732.71	6805.05
-4661 SPF	8384	229.17	240.32	7.55	2360.03	7204.12
-5221 1.01 YEAR	945	226.9	237.4	2.93	322.23	2806.31
-5221 2 YEAR	198032	226.9	242.17	24.65	22594.44	5276.59
-5221 5 YEAR	2784	226.9	238.53	2.51	4468.85	3914.85
-5221 10 YEAR	3344	226.9	238.7	2.57	5150.89	4109.27
-5221 25 YEAR	3957	226.9	238.88	2.6	5914.39	4362.64
-5221 50 YEAR	4532	226.9	239.03	2.63	6577.64	4496.57
-5221 100 YEAR	4907	226.9	239.12	2.65	6989.19	4641.65
-5221 500 YEAR	6113	226.9	239.35	2.78	8094.32	4949.66
-5221 SPF	8384	226.9	239.79	2.85	10294.86	5055.09

-4001 50 YEAR	4532	229.86	241.13	3.28	3020.69	7215.33	0
-4001 100 YEAR	4907	229.86	241.23	3.33	3199.89	7250.85	0
-4001 500 YEAR	6113	229.86	241.52	3.47	3759.89	7472.1	0
-4001 SPF	8384	229.86	241.9	3.79	4649.19	7927.4	0
-4661 1.01 YEAR	945	229.17	237.93	3.25	291.12	4734.94	0
-4661 2 YEAR	198032	229.17	247.81	9.41	39437.86	8502.59	0
-4661 5 YEAR	2784	229.17	238.57	8.53	326.36	5323.68	0
-4661 10 YEAR	3344	229.17	239.44	6.18	1161.91	6736.9	0
-4661 25 YEAR	3957	229.17	239.56	6.59	1315.62	6765.14	0
-4661 50 YEAR	4532	229.17	239.67	6.87	1453.93	6795.78	0
-4661 100 YEAR	4907	229.17	239.73	7.07	1531.55	6798.37	0
-4661 500 YEAR	6113	229.17	239.88	7.74	1732.71	6805.05	0
-4661 SPF	8384	229.17	240.32	7.55	2360.03	7204.12	0
-5221 1.01 YEAR	945	226.9	237.4	2.93	322.23	2806.31	0
-5221 2 YEAR	198032	226.9	242.17	24.65	22594.44	5276.59	0
-5221 5 YEAR	2784	226.9	238.53	2.51	4468.85	3914.85	0
-5221 10 YEAR	3344	226.9	238.7	2.57	5150.89	4109.27	0
-5221 25 YEAR	3957	226.9	238.88	2.6	5914.39	4362.64	0
-5221 50 YEAR	4532	226.9	239.03	2.63	6577.64	4496.57	0
-5221 100 YEAR	4907	226.9	239.12	2.65	6989.19	4641.65	0
-5221 500 YEAR	6113	226.9	239.35	2.78	8094.32	4949.66	0
-5221 SPF	8384	226.9	239.79	2.85	10294.86	5055.09	0

Proposed FEMA FIS Data Tables

HEC-RAS Plan: BA FIS 2-5-13 River: RIVER-1 Reach: Reach-1

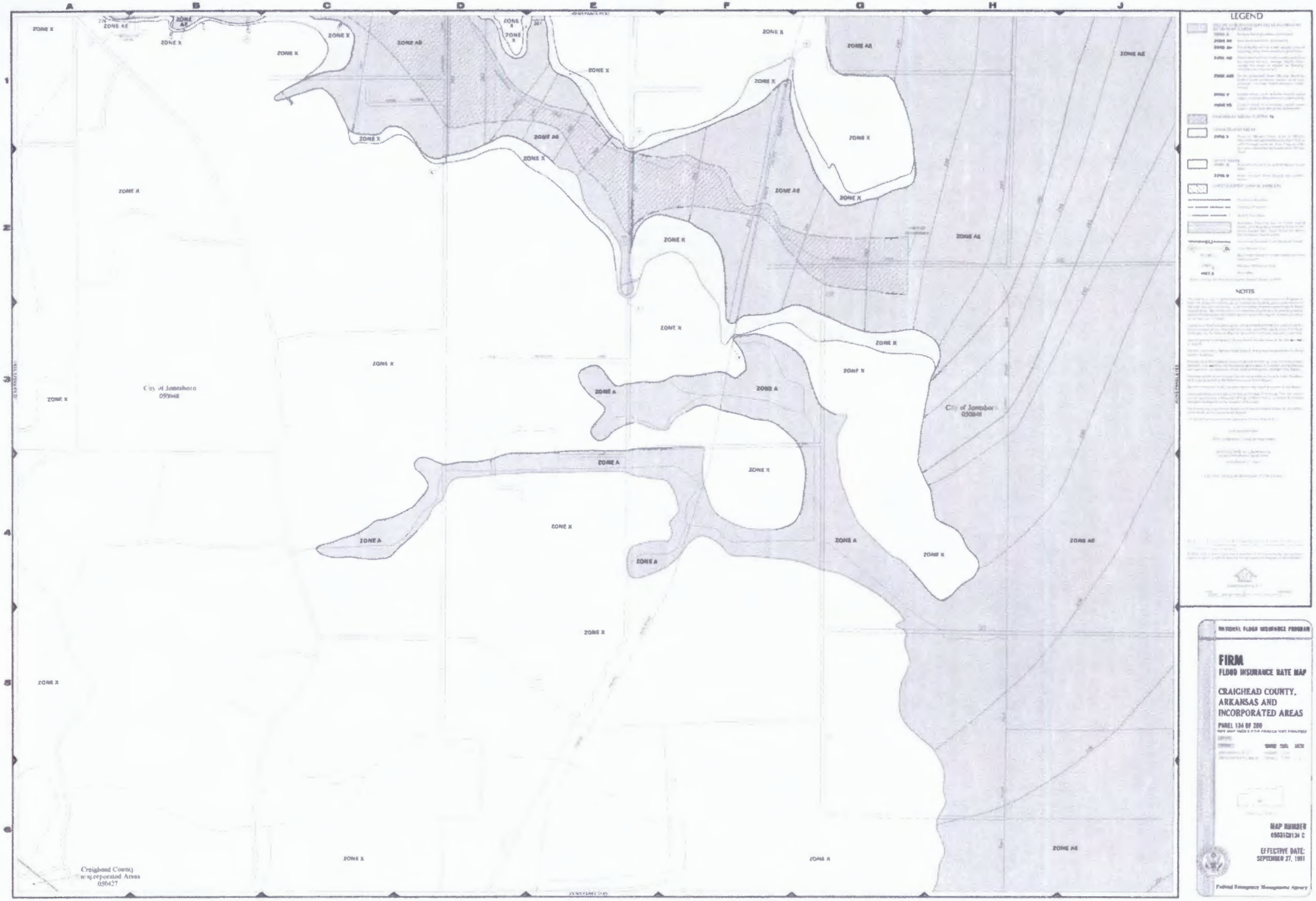
Reach	River Sta	Profile	Top Wdth Act	Area	Vel Total	W.S. Elev	Base WS	Prof Delta WS
			(ft)	(sq ft)	(ft/s)	(ft)	(ft)	(ft)
Reach-1	3608	100 YEAR	155.92	5226.35	4.16	253.87	253.87	
Reach-1	3608	BA FIS	155.93	1225.98	4.16	253.88	253.87	0.00
Reach-1	3602 BR U	100 YEAR		1118.55	4.56	253.50	253.50	
Reach-1	3602 BR U	BA FIS		1118.55	4.56	253.50	253.50	0.00
Reach-1	3602 BR D	100 YEAR	148.43	1074.21	4.75	253.20	253.20	
Reach-1	3602 BR D	BA FIS	148.80	1100.70	4.64	253.38	253.20	0.18
Reach-1	3596	100 YEAR	154.55	2913.47	4.55	253.20	253.20	
Reach-1	3596	BA FIS	154.92	1148.69	4.44	253.38	253.20	0.18
Reach-1	3541	100 YEAR	79.99	8107.84	9.00	251.79	251.79	
Reach-1	3541	BA FIS	82.22	591.78	8.62	252.10	251.79	0.31
Reach-1	2441	100 YEAR	189.42	1946.81	5.54	248.68	248.68	
Reach-1	2441	BA FIS	95.92	965.43	5.29	249.41	248.68	0.72
Reach-1	1798	100 YEAR	358.68	1956.09	5.34	247.72	247.72	
Reach-1	1798	BA FIS	97.18	1021.33	5.00	248.63	247.72	0.91
Reach-1	1131	100 YEAR	1828.96	1829.01	2.79	246.96	246.96	
Reach-1	1131	BA FIS	493.16	1087.13	4.69	247.77	246.96	0.81
Reach-1	130	100 YEAR	2688.50	3773.79	1.91	246.02	246.02	
Reach-1	130	BA FIS	887.42	2766.92	3.18	246.72	246.02	0.70
Reach-1	90 BR U	100 YEAR	2583.41	2413.16	2.06	245.97	245.97	
Reach-1	90 BR U	BA FIS	650.10	1420.06	3.78	246.59	245.97	0.61
Reach-1	90 BR D	100 YEAR	3290.56	2840.70	1.73	245.94	245.94	
Reach-1	90 BR D	BA FIS	583.06	1129.45	4.34	246.35	245.94	0.40
Reach-1	0	100 YEAR	3382.84	3258.24	1.83	245.81	245.81	
Reach-1	0	BA FIS	611.34	1686.31	3.59	246.29	245.81	0.47
Reach-1	-561	100 YEAR	1510.79	20849.67	3.34	244.64	244.64	
Reach-1	-561	BA FIS	685.35	1659.39	2.96	245.50	244.64	0.86
Reach-1	-1421	100 YEAR	1391.88	23802.34	2.21	243.62	243.62	
Reach-1	-1421	BA FIS	690.44	1748.70	2.81	244.58	243.62	0.97
Reach-1	-2193	100 YEAR	1306.73	24462.62	2.42	242.78	242.78	
Reach-1	-2193	BA FIS	669.57	1532.86	3.20	243.65	242.78	0.87
Reach-1	-3045	100 YEAR	2144.79	29660.18	1.54	242.00	242.00	
Reach-1	-3045	BA FIS	673.94	2125.79	2.31	242.73	242.00	0.73
Reach-1	-4001	100 YEAR	1865.35	35908.35	1.54	241.23	241.23	
Reach-1	-4001	BA FIS	756.30	2032.79	2.41	241.65	241.23	0.42
Reach-1	-4661	100 YEAR	1311.25	28247.26	3.17	239.74	239.74	
Reach-1	-4661	BA FIS	858.66	1847.46	2.66	240.58	239.74	0.84

HEC-RAS Plan: BA FIS 2-5-13 River: RIVER-1 Reach: Reach-1 (Continued)

Reach	River Sta	Profile	Top Wdth Act	Area	Vel Total	W.S. Elev	Base WS	Prof Delta WS
			(ft)	(sq ft)	(ft/s)	(ft)	(ft)	(ft)
Reach-1	-5221	100 YEAR	4641.65	6989.19	0.70	239.12	239.12	
Reach-1	-5221	BA FIS	1699.00	4885.17	1.00	240.12	239.12	1.00

HEC-RAS Plan: BA FIS 2-5-13 River: RIVER-1 Reach: Reach-1

Reach	River Sta	Profile	W.S. Elev	Prof Delta WS	E.G. Elev	Top Width Act	Q Left	Q Channel	Q Right	Enc Sta L	Ch Sta L	Ch Sta R	Enc Sta R
			(ft)	(ft)	(ft)	(ft)	(cfs)	(cfs)	(cfs)	(ft)	(ft)	(ft)	(ft)
Reach-1	3606	100 YEAR	253.87		254.14	155.92		5103.00			11851.00	12008.00	
Reach-1	3606	BA FIS	253.88	0.00	254.15	155.93		5103.00		11851.00	11851.00	12008.00	12008.00
Reach-1	3602 BR U	100 YEAR	253.50		254.14			5103.00			11851.00	12008.00	
Reach-1	3602 BR U	BA FIS	253.50	0.00	254.15			5103.00		11851.00	11851.00	12008.00	12008.00
Reach-1	3602 BR D	100 YEAR	253.20		253.52	148.43		5103.00			11851.00	12008.00	
Reach-1	3602 BR D	BA FIS	253.38	0.18	253.69	148.80		5103.00		11851.00	11851.00	12008.00	12008.00
Reach-1	3596	100 YEAR	253.20		253.52	154.55		5103.00			11851.00	12008.00	
Reach-1	3596	BA FIS	253.38	0.18	253.69	154.92		5103.00		11851.00	11851.00	12008.00	12008.00
Reach-1	3541	100 YEAR	251.79		253.05	79.99		5103.00			2483.85	2601.61	
Reach-1	3541	BA FIS	252.10	0.31	253.25	82.22		5103.00		2484.00	2483.85	2601.61	2601.00
Reach-1	2441	100 YEAR	248.68		249.18	189.42		5096.33	6.67		2500.25	2666.92	
Reach-1	2441	BA FIS	249.41	0.72	249.84	95.92		5103.00		2500.00	2500.25	2666.92	2667.00
Reach-1	1798	100 YEAR	247.72		248.18	358.68		5098.76	4.24		2537.15	2667.87	
Reach-1	1798	BA FIS	248.63	0.91	249.02	97.18		5103.00		2537.00	2537.15	2667.87	2667.00
Reach-1	1131	100 YEAR	246.96		247.30	1828.96		4272.68	830.32		2058.44	2166.93	
Reach-1	1131	BA FIS	247.77	0.81	248.23	493.16		4989.22	113.78	2058.00	2058.44	2166.93	3580.00
Reach-1	130	100 YEAR	246.02		246.19	2686.50		3834.20	1072.80		3922.97	4124.00	
Reach-1	130	BA FIS	246.72	0.70	246.94	887.42	339.79	4567.21		3000.00	3922.97	4124.00	4124.00
Reach-1	90 BR U	100 YEAR	245.97		246.13	2583.41		3674.40	1232.60		3922.97	4124.00	
Reach-1	90 BR U	BA FIS	246.59	0.61	246.86	650.10	308.16	4598.84		3000.00	3922.97	4124.00	4124.00
Reach-1	90 BR D	100 YEAR	245.94		246.06	3290.56	5.20	3011.57	1890.23		4057.15	4213.00	
Reach-1	90 BR D	BA FIS	246.35	0.40	246.71	583.06	225.13	4681.87		3300.00	4057.15	4213.00	4213.00
Reach-1	0	100 YEAR	245.81		245.98	3382.84	123.67	3538.40	1244.94		4057.15	4213.00	
Reach-1	0	BA FIS	246.29	0.47	246.56	611.34	501.27	4405.73		3300.00	4057.15	4213.00	4213.00
Reach-1	-561	100 YEAR	244.64		245.02	1510.79	1257.72	3509.35	139.93		4844.70	4952.71	
Reach-1	-561	BA FIS	245.50	0.86	245.69	685.35	2022.06	2884.94		4252.00	4844.70	4952.71	4952.00
Reach-1	-1421	100 YEAR	243.62		243.75	1391.88	2493.54	2410.92	2.54		5110.12	5207.30	
Reach-1	-1421	BA FIS	244.58	0.97	244.76	690.44	2065.26	2841.74		4480.00	5110.12	5207.30	5207.00
Reach-1	-2193	100 YEAR	242.78		242.94	1306.73	2415.85	2491.16	0.00		5322.53	5424.49	
Reach-1	-2193	BA FIS	243.65	0.87	243.88	669.57	1816.02	3090.98		4738.00	5322.53	5424.49	5424.00
Reach-1	-3045	100 YEAR	242.00		242.08	2144.79	3118.21	1649.58	139.22		5483.30	5581.40	
Reach-1	-3045	BA FIS	242.73	0.73	242.85	673.94	2868.63	2038.37		4878.00	5483.30	5581.40	5581.00
Reach-1	-4001	100 YEAR	241.23		241.30	1865.35	2860.06	1635.62	411.32		6661.04	6752.25	
Reach-1	-4001	BA FIS	241.65	0.42	241.79	756.30	2738.13	2168.87		5985.00	6661.04	6752.25	6752.00
Reach-1	-4661	100 YEAR	239.74		240.19	1311.25	2132.70	2774.30			6823.33	6920.25	
Reach-1	-4661	BA FIS	240.58	0.84	240.78	858.66	2689.20	2217.81		6020.00	6823.33	6920.25	6920.00
Reach-1	-5221	100 YEAR	239.12		239.15	4641.65	3583.27	1089.94	233.79		11669.00	11726.00	
Reach-1	-5221	BA FIS	240.12	1.00	240.16	1699.00	3586.07	1320.93		10027.00	11669.00	11726.00	11726.00


A
B
C
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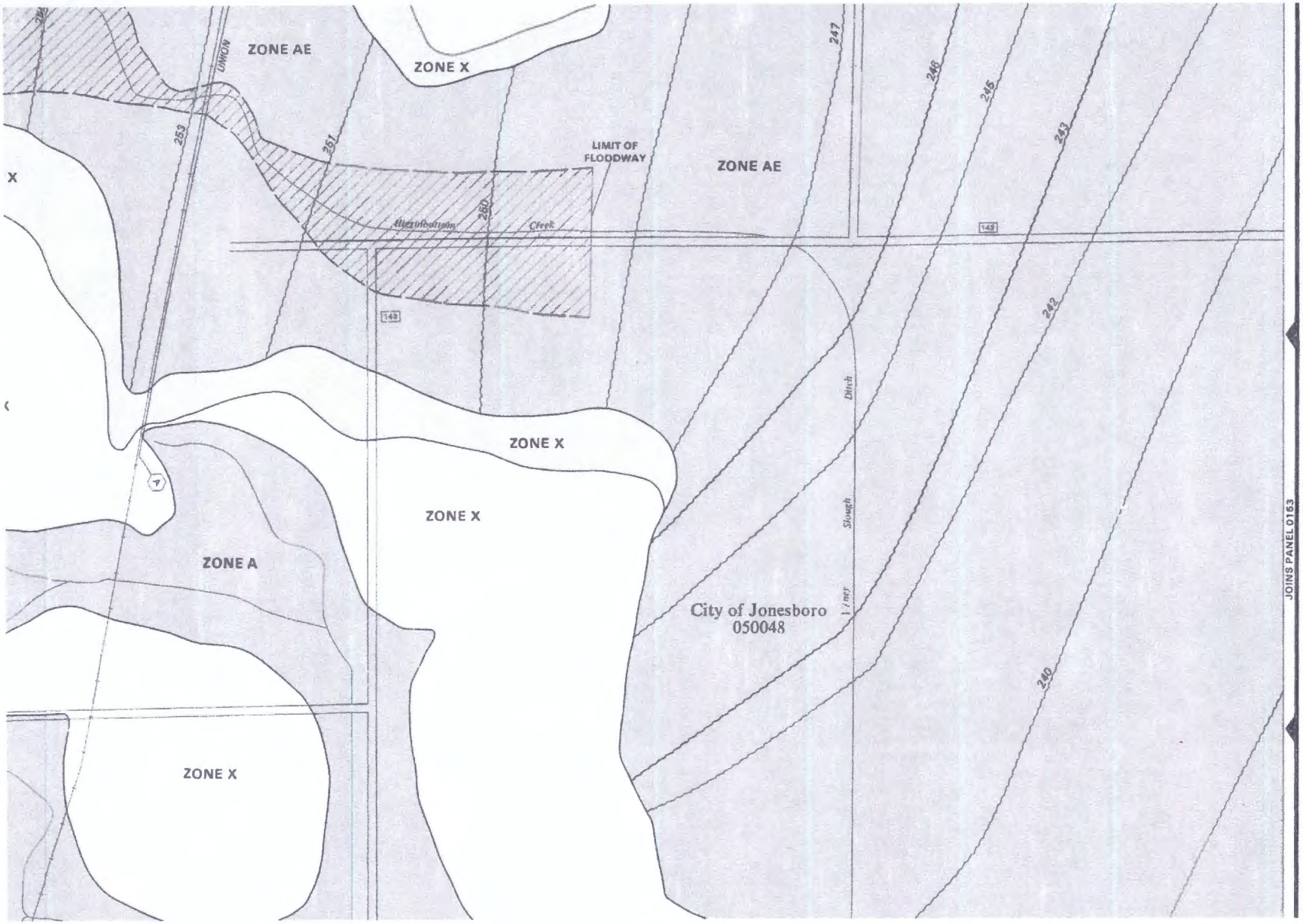
H
J
1
2
3
4
5
6
ZONE X
ZONE AE
ZONE A
ZONE AO
City of Jonesboro
050448
Craighead County
(Unincorporated Areas)
050427
LEGEND
NOTES
NATIONAL FLOOD INSURANCE PROGRAM
FIRM
FLOOD INSURANCE RATE MAP
CRAIGHEAD COUNTY, ARKANSAS AND INCORPORATED AREAS
PANEL 134 OF 200
MAP NUMBER
05031C0134 C
EFFECTIVE DATE:
SEPTEMBER 27, 1991
Federal Emergency Management Agency



ZONE D — Areas in which flood hazards mined

UNDEVELOPED COASTAL BARRIERS

Floodplain Boundary

Floodway Boundary

Zone D Boundary

Boundary Dividing Special F Zones, and Boundary Dividing ferent Coastal Base Flood Elev Special Flood Hazard Zones.

513 — Base Flood Elevation Line; Eleva

D — D — Cross Section Line

(EL 987) — Base Flood Elevation in Feet W Within Zone*

$RM7_X$ — Elevation Reference Mark

•M1.5 — River Mile

*Referenced to the National Geodetic Vertical Datum of 1929

NOTES

This map is for use in administering the National Flood Insurance does not necessarily identify all areas subject to flooding, particula drainage sources of small size, or all planimetric features outside S Hazard Areas. The community map repository should be consulte updated flood hazard information prior to use of this map for prope or construction purposes.

Coastal base flood elevations apply only landward of 0.0 NGVD, an effects of wave action; these elevations may also differ significant developed by the National Weather Service for hurricane evacuati

Areas of special flood hazard (100-year flood) include Zones A, AE, V, and VE.

Certain areas not in Special Flood Hazard Areas may be protec control structures.

Boundaries of the floodways were computed at cross sections and between cross sections. The floodways were based on hydraulic c with regard to requirements of the Federal Emergency Managem

Floodway widths in some areas may be too narrow to show to sca widths are provided in the Flood Insurance Study Report.

Elevation reference marks are described in the Flood Insurance St

Corporate limits shown are current as of the date of this map. The contact appropriate community officials to determine if corporat changed subsequent to the issuance of this map.

For community map revision history prior to countywide mapping 6.0 of the Flood Insurance Study Report.

For adjoining map panels see separately printed Map Index.

MAP REPOSITORY

Refer to Repository Listing on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

SEPTEMBER 27, 1991

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL


ZONE AE
ZONE X
ZONE A
LIMIT OF DETAILED STUDY
Union Pacific Railroad Company Reporting Marks: UP
STADIUM BLVD
COLONY DR
RICHARDSON DR
LIMESTONE DR
LEATHERWOOD DR
ANTOSH CR
PLANTERS DR
GLENN PLACE
PEABODY DRIVE
FOX ROAD
LONGCREST DR
SHANLEY DR
PROS POND RD
LEXEE DR
KEELY DR
BEACON ST
JERDON CV
OAKBROOK DR
SOUTHBROOK DR
STONEBROOK DRIVE
COUNTRYBROOK DRIVE
EASTBROOK CR
FOX MEADOW LN
SIGELS RD
163 SPUR
BUS

SCALE: 1" = 1,000'

LEGEND

SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD

ZONE A

ZONE AE

ZONE AH

ZONE AO

ZONE A99

ZONE V

ZONE VE

FLOODWAY AREAS IN ZONE AE

OTHER FLOOD AREAS

ZONE X

OTHER AREAS

ZONE X

ZONE D

UNDEVELOPED COASTAL BARRIERS

NOTES

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

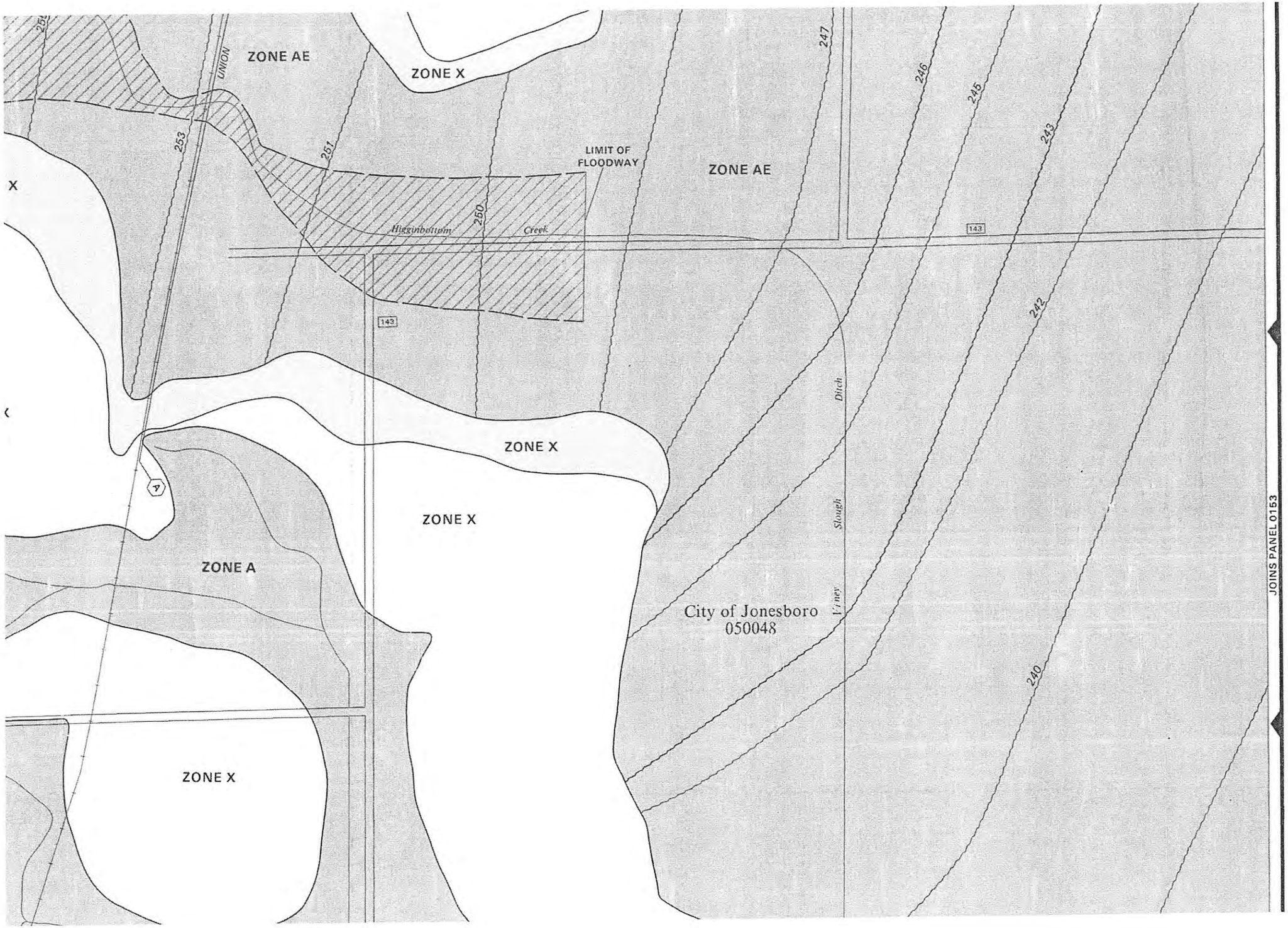
CRAIGHEAD COUNTY, ARKANSAS AND INCORPORATED AREAS

PANEL 134 OF 200

MAP NUMBER
05031C0134 C

EFFECTIVE DATE:
SEPTEMBER 27, 1991

Federal Emergency Management Agency



ZONE D Areas in which flood hazards mined.

UNDEVELOPED COASTAL BARRIERS

Floodplain Boundary

Floodway Boundary

Zone D Boundary

Boundary Dividing Special F Zones, and Boundary Dividing ferent Coastal Base Flood Elev Special Flood Hazard Zones.

513 Base Flood Elevation Line; Eleva

D D Cross Section Line

(EL 987) Base Flood Elevation in Feet W Within Zone*

RM7 X Elevation Reference Mark

•M1.5 River Mile

*Referenced to the National Geodetic Vertical Datum of 1929

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For adjoining map panels see separately printed Map Index.

MAP REPOSITORY

Refer to Repository Listing on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP

SEPTEMBER 27, 1991

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL


ZONE AE
ZONE X
ZONE A
LIMIT OF DETAILED STUDY
Union Pacific Railroad Company Reporting Marks: UP
VINEY SLOUGH DITCH
WHITEMANS DITCH
LATERAL NO. 1
INGELS RD
LIMESTONE DR
STADIUM BLVD
RICHARDSON DR
INDUSTRIAL DR
LONGCREST DR
COLONY DR
FROG POND RD
HARRISBURG RD (HWY 1B)
NETTLETON AVE (HWY 463)
163 SPUR
BUS
163

SCALE: 1" = 1,000'

U.S. DEPARTMENT OF HOMELAND SECURITY
FEDERAL EMERGENCY MANAGEMENT AGENCY

OVERVIEW & CONCURRENCE FORM

O.M.B No. 1660-0016
Expires February 28, 2014

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 1 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless it displays a valid OMB control number. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 1800 South Bell Street, Arlington, VA 20958-3005, Paperwork Reduction Project (1660-0016). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. **Please do not send your completed survey to the above address.**

PRIVACY ACT STATEMENT

AUTHORITY: The National Flood Insurance Act of 1968, Public Law 90-448, as amended by the Flood Disaster Protection Act of 1973, Public Law 93-234.

PRINCIPAL PURPOSE(S): This information is being collected for the purpose of determining an applicant's eligibility to request changes to National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (FIRM).

ROUTINE USE(S): The information on this form may be disclosed as generally permitted under 5 U.S.C § 552a(b) of the Privacy Act of 1974, as amended. This includes using this information as necessary and authorized by the routine uses published in DHS/FEMA/NFIP/LOMA-1 National Flood Insurance Program (NFIP); Letter of Map Amendment (LOMA) February 15, 2006, 71 FR 7990.

DISCLOSURE: The disclosure of information on this form is voluntary; however, failure to provide the information requested may delay or prevent FEMA from processing a determination regarding a requested change to a (NFIP) Flood Insurance Rate Maps (FIRM).

A. REQUESTED RESPONSE FROM DHS-FEMA

This request is for a (check one):

☐ CLOMR: A letter from DHS-FEMA commenting on whether a proposed project, if built as proposed, would justify a map revision, or proposed hydrology changes (See 44 CFR Ch. 1, Parts 60, 65 & 72).

☒ LOMR: A letter from DHS-FEMA officially revising the current NFIP map to show the changes to floodplains, regulatory floodway or flood elevations. (See 44 CFR Ch. 1, Parts 60, 65 & 72)

B. OVERVIEW

1. The NFIP map panel(s) affected for all impacted communities is (are):

Community No.	Community Name	State	Map No.	Panel No.	Effective Date
Example: 480301 480287	City of Katy Harris County	TX TX	48473C 48201C	0005D 0220G	02/08/83 09/28/90
050048	City of Jonesboro	AR	05031C	0134C	09/27/91
050427	Unincorporated Areas	AR	05031C	0134C	09/27/91

2. a. Flooding Source: Higginbottom Creek & Viney Slough Ditch

   b. Types of Flooding: ☒ Riverine ☐ Coastal ☐ Shallow Flooding (e.g., Zones AO and AH)
   ☐ Alluvial fan ☐ Lakes ☐ Other (Attach Description)

3. Project Name/Identifier: Unico Bank

4. FEMA zone designations affected: AE (choices: A, AH, AO, A1-A30, A99, AE, AR, V, V1-V30, VE, B, C, D, X)

5. Basis for Request and Type of Revision:

   a. The basis for this revision request is (check all that apply)

   ☒ Physical Change ☒ Improved Methodology/Data ☒ Regulatory Floodway Revision ☒ Base Map Changes
   ☐ Coastal Analysis ☒ Hydraulic Analysis ☐ Hydrologic Analysis ☒ Corrections
   ☐ Weir-Dam Changes ☐ Levee Certification ☐ Alluvial Fan Analysis ☐ Natural Changes
   ☒ New Topographic Data ☐ Other (Attach Description)

   Note: A photograph and narrative description of the area of concern is not required, but is very helpful during review.

b. The area of revision encompasses the following structures (check all that apply)

Structures: ☐ Channelization ☐ Levee/Floodwall ☒ Bridge/Culvert

☐ Dam ☒ Fill ☐ Other (Attach Description)

6. ☐ Documentation of ESA compliance is submitted (required to initiate CLOMR review). Please refer to the instructions for more information.

C. REVIEW FEE

Has the review fee for the appropriate request category been included? ☒ Yes Fee amount: $5,300

☐ No, Attach Explanation

Please see the DHS-FEMA Web site at http://www.fema.gov/plan/prevent/fhm/frm_fees.shtm **for Fee Amounts and Exemptions.**

D. SIGNATURE

All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Name: Bernie Auld, PE	Company: BA Engineering	
Mailing Address: 3524 Greenwood Drive Hermitage, TN 37076	Daytime Telephone No.: 615.804.7290	Fax No.:
	E-Mail Address: bernie@baengr.com	
Signature of Requester (required):	Date: 04/30/2013	

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision (LOMR) or conditional LOMR request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirements for when fill is placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a conditional LOMR, will be obtained. For Conditional LOMR requests, the applicant has documented Endangered Species Act (ESA) compliance to FEMA prior to FEMA's review of the Conditional LOMR application. For LOMR requests, I acknowledge that compliance with Sections 9 and 10 of the ESA has been achieved independently of FEMA's process. For actions authorized, funded, or being carried out by Federal or State agencies, documentation from the agency showing its compliance with Section 7(a)(2) of the ESA will be submitted. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by FEMA, all analyses and documentation used to make this determination.

Community Official's Name and Title:	Community Name: City of Jonesboro	
Mailing Address: 307 Vine Street Jonesboro, Arkansas 72401	Daytime Telephone No.: 870.932.2438	Fax No.:
	E-Mail Address:	
Community Official's Signature (required):	Date:	

CERTIFICATION BY REGISTERED PROFESSIONAL ENGINEER AND/OR LAND SURVEYOR

This certification is to be signed and sealed by a licensed land surveyor, registered professional engineer, or architect authorized by law to certify elevation information data, hydrologic and hydraulic analysis, and any other supporting information as per NFIP regulations paragraph 65.2(b) and as described in the MT-2 Forms Instructions. All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: Bernie Auld, PE	License No.: AR-9293		Expiration Date: 12.31.2013
Company Name: BA Engineering	Telephone No.: 615.804.7290		Fax No.:
Signature:	Date: 04/30/2013	E-Mail Address: bernie@baengr.com	

Ensure the forms that are appropriate to your revision request are included in your submittal.

Form Name and (Number)	Required if ...
☒ Riverine Hydrology and Hydraulics Form (Form 2)	New or revised discharges or water-surface elevations
☒ Riverine Structures Form (Form 3)	Channel is modified, addition/revision of bridge/culverts, addition/revision of levee/floodwall, addition/revision of dam
☐ Coastal Analysis Form (Form 4)	New or revised coastal elevations
☐ Coastal Structures Form (Form 5)	Addition/revision of coastal structure
☐ Alluvial Fan Flooding Form (Form 6)	Flood control measures on alluvial fans

Seal (Optional)

U.S. DEPARTMENT OF HOMELAND SECURITY
FEDERAL EMERGENCY MANAGEMENT AGENCY

RIVERINE HYDROLOGY & HYDRAULICS FORM

O.M.B No. 1660-0016
Expires February 28, 2014

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 3.5 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 1800 South Bell Street, Arlington VA 20958-3005, Paperwork Reduction Project (1660-0016). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. **Please do not send your completed survey to the above address.**

PRIVACY ACT STATEMENT

AUTHORITY: The National Flood Insurance Act of 1968, Public Law 90-448, as amended by the Flood Disaster Protection Act of 1973, Public Law 93-234.

PRINCIPAL PURPOSE(S): This information is being collected for the purpose of determining an applicant's eligibility to request changes to National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (FIRM).

ROUTINE USE(S): The information on this form may be disclosed as generally permitted under 5 U.S.C § 552a(b) of the Privacy Act of 1974, as amended. This includes using this information as necessary and authorized by the routine uses published in DHS/FEMA/NFIP/LOMA-1 National Flood Insurance Program (NFIP); Letter of Map Amendment (LOMA) February 15, 2006, 71 FR 7990.

DISCLOSURE: The disclosure of information on this form is voluntary; however, failure to provide the information requested may delay or prevent FEMA from processing a determination regarding a requested change to a NFIP Flood Insurance Rate Maps (FIRM).

Flooding Source: Higginbottom Creek & Viney Slough Ditch

Note: Fill out one form for each flooding source studied

A. HYDROLOGY

1. Reason for New Hydrologic Analysis (check all that apply)

☒ Not revised (skip to section B) ☐ No existing analysis ☐ Improved data
☐ Alternative methodology ☐ Proposed Conditions (CLOMR) ☐ Changed physical condition of watershed

2. Comparison of Representative 1%-Annual-Chance Discharges

Location	Drainage Area (Sq. Mi.)	Effective/FIS (cfs)	Revised (cfs)

3. Methodology for New Hydrologic Analysis (check all that apply)

☐ Statistical Analysis of Gage Records ☐ Precipitation/Runoff Model → Specify Model: _____
☐ Regional Regression Equations ☐ Other (please attach description)

Please enclose all relevant models in digital format, maps, computations (including computation of parameters), and documentation to support the new analysis.

4. Review/Approval of Analysis

If your community requires a regional, state, or federal agency to review the hydrologic analysis, please attach evidence of approval/review.

5. Impacts of Sediment Transport on Hydrology

Is the hydrology for the revised flooding source(s) affected by sediment transport? ☐ Yes ☐ No

If yes, then fill out Section F (Sediment Transport) of Form 3. If No, then attach your explanation..

B. HYDRAULICS

1. Reach to be Revised

	Description	Cross Section	Water-Surface Elevations (ft.) Effective	Proposed/Revised
Downstream Limit*	Viney Slough Ditch	Sta -5221 (COE RM 21	239.12	239.12
Upstream Limit*	Higginbotttom Creek	Sta 3608 (COE RM 0.6	253.91	253.87

*Proposed/Revised elevations must tie-into the Effective elevations within 0.5 foot at the downstream and upstream limits of revision.

2. Hydraulic Method/Model Used: Merge HEC-2 files, import into HEC-RAS then revise

3. Pre-Submittal Review of Hydraulic Models*

DHS-FEMA has developed two review programs, CHECK-2 and CHECK-RAS, to aid in the review of HEC-2 and HEC-RAS hydraulic models, respectively. We recommend that you review your HEC-2 and HEC-RAS models with CHECK-2 and CHECK-RAS.

4.

Models Submitted	Natural Run		Floodway Run		Datum
Duplicate Effective Model*	File Name: See Reference 1	Plan Name:	File Name:	Plan Name:	
Corrected Effective Model*	File Name: See Reference 1	Plan Name:	File Name: NA	Plan Name: NA	
Existing or Pre-Project Conditions Model	File Name: See Reference 1	Plan Name:	File Name: NA	Plan Name: NA	
Revised or Post-Project Conditions Model	File Name: See Reference 1	Plan Name:	File Name:	Plan Name:	
Other - (attach description)	File Name:	Plan Name:	File Name:	Plan Name:	

* For details, refer to the corresponding section of the instructions.

☒ Digital Models Submitted? (Required)

C. MAPPING REQUIREMENTS

A **certified topographic work map** must be submitted showing the following information (where applicable): the boundaries of the effective, existing, and proposed conditions 1%-annual-chance floodplain (for approximate Zone A revisions) or the boundaries of the 1%- and 0.2%-annual-chance floodplains and regulatory floodway (for detailed Zone AE, AO, and AH revisions); location and alignment of all cross sections with stationing control indicated; stream, road, and other alignments (e.g., dams, levees, etc.); current community easements and boundaries; boundaries of the requester's property; certification of a registered professional engineer registered in the subject State; location and description of reference marks; and the referenced vertical datum (NGVD, NAVD, etc.).

☒ Digital Mapping (GIS/CADD) Data Submitted (preferred)

Topographic Information: City of Jonesboro LiDAR

Source: City of Jonesboro Date: _____

Accuracy: _____

Note that the boundaries of the existing or proposed conditions floodplains and regulatory floodway to be shown on the revised FIRM and/or FBFM must tie-in with the effective floodplain and regulatory floodway boundaries. Please attach **a copy of the effective FIRM and/or FBFM**, at the same scale as the original, annotated to show the boundaries of the revised 1%-and 0.2%-annual-chance floodplains and regulatory floodway that tie-in with the boundaries of the effective 1%-and 0.2%-annual-chance floodplain and regulatory floodway at the upstream and downstream limits of the area on revision.

☒ Annotated FIRM and/or FBFM (Required)

D. COMMON REGULATORY REQUIREMENTS*

1. For LOMR/CLOMR requests, do Base Flood Elevations (BFEs) increase? ☐ Yes ☒ No

   a. For CLOMR requests, if either of the following is true, please submit **evidence of compliance with Section 65.12 of the NFIP regulations**:

      - The proposed project encroaches upon a regulatory floodway and would result in increases above 0.00 foot compared to pre-project conditions.
      - The proposed project encroaches upon a SFHA with or without BFEs established and would result in increases above 1.00 foot compared to pre-project conditions.

   b. Does this LOMR request cause increase in the BFE and/or SFHA compared with the effective BFEs and/or SFHA? ☐ Yes ☒ No

      If Yes, please attach **proof of property owner notification and acceptance (if available)**. Elements of and examples of property owner notifications can be found in the MT-2 Form 2 Instructions.

2. Does the request involve the placement or proposed placement of fill? ☒ Yes ☐ No

   If Yes, the community must be able to certify that the area to be removed from the special flood hazard area, to include any structures or proposed structures, meets all of the standards of the local floodplain ordinances, and is reasonably safe from flooding in accordance with the NFIP regulations set forth at 44 CFR 60.3(A)(3), 65.5(a)(4), and 65.6(a)(14). Please see the MT-2 instructions for more information.

3. For LOMR requests, is the regulatory floodway being revised? ☒ Yes ☐ No

   If Yes, attach **evidence of regulatory floodway revision notification**. As per Paragraph 65.7(b)(1) of the NFIP Regulations, notification is required for requests involving revisions to the regulatory floodway. (Not required for revisions to approximate 1%-annual-chance floodplains [studied Zone A designation] unless a regulatory floodway is being established. Elements and examples of regulatory floodway revision notification can be found in the MT-2 Form 2 Instructions.)

4. For CLOMR requests, please submit documentation to FEMA and the community to show that you have complied with Sections 9 and 10 of the Endangered Species Act (ESA).

For actions authorized, funded, or being carried out by Federal or State agencies, please submit documentation from the agency showing its compliance with Section 7(a)(2) of the ESA. Please see the MT-2 instructions for more detail.

* Not inclusive of all applicable regulatory requirements. For details, see 44 CFR parts 60 and 65.

DEPARTMENT OF HOMELAND SECURITY
FEDERAL EMERGENCY MANAGEMENT AGENCY

RIVERINE STRUCTURES FORM

O.M.B. NO. 1660-0016
Expires February 28, 2014

PAPERWORK BURDEN DISCLOSURE NOTICE

Public reporting burden for this form is estimated to average 7 hours per response. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing, reviewing, and submitting the form. You are not required to respond to this collection of information unless a valid OMB control number appears in the upper right corner of this form. Send comments regarding the accuracy of the burden estimate and any suggestions for reducing this burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 1800 South Bell Street, Arlington, VA 20598-3005, Paperwork Reduction Project (1660-0016). Submission of the form is required to obtain or retain benefits under the National Flood Insurance Program. **Please do not send your completed survey to the above address.**

PRIVACY ACT STATEMENT

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DISCLOSURE: The disclosure of information on this form is voluntary; however, failure to provide the information requested may delay or prevent FEMA from processing a determination regarding a requested change to a NFIP Flood Insurance Rate Maps (FIRM).

Flooding Source: Higginbottom Creek & Viney Slough Ditch

Note: Fill out one form for each flooding source studied.

A. GENERAL

Complete the appropriate section(s) for each Structure listed below:

Channelization.....complete Section B
Bridge/Culvert.....complete Section C
Dam.....complete Section D
Levee/Floodwall.....complete Section E
Sediment Transport.....complete Section F (if required)

Description Of Modeled Structure

1. Name of Structure: Ingels Road

   Type (check one): ☐ Channelization ☒ Bridge/Culvert ☐ Levee/Floodwall ☐ Dam

   Location of Structure: Sta 90 Ingels Road

   Downstream Limit/Cross Section: Sta 0

   Upstream Limit/Cross Section: Sta 130

2. Name of Structure: _____

   Type (check one): ☐ Channelization ☐ Bridge/Culvert ☐ Levee/Floodwall ☐ Dam

   Location of Structure: _____

   Downstream Limit/Cross Section: _____

   Upstream Limit/Cross Section: _____

3. Name of Structure: _____

   Type (check one) ☐ Channelization ☐ Bridge/Culvert ☐ Levee/Floodwall ☐ Dam

   Location of Structure: _____

   Downstream Limit/Cross Section: _____

   Upstream Limit/Cross Section: _____

NOTE: FOR MORE STRUCTURES, ATTACH ADDITIONAL PAGES AS NEEDED.

B. CHANNELIZATION

Flooding Source: _____

Name of Structure: _____

1. Hydraulic Considerations

The channel was designed to carry _____ (cfs) and/or the _____-year flood.

The design elevation in the channel is based on (check one):

☐ Subcritical flow ☐ Critical flow ☐ Supercritical flow ☐ Energy grade line

If there is the potential for a hydraulic jump at the following locations, check all that apply and attach an explanation of how the hydraulic jump is controlled without affecting the stability of the channel.

☐ Inlet to channel ☐ Outlet of channel ☐ At Drop Structures ☐ At Transitions

☐ Other locations (specify): _____

2. Channel Design Plans

Attach the plans of the channelization certified by a registered professional engineer, as described in the instructions.

3. Accessory Structures

The channelization includes (check one):

☐ Levees [Attach Section E (Levee/Floodwall)] ☐ Drop structures ☐ Superelevated sections

☐ Transitions in cross sectional geometry ☐ Debris basin/detention basin [Attach Section D (Dam/Basin)] ☐ Energy dissipator

☐ Weir ☐ Other (Describe):

4. Sediment Transport Considerations

Are the hydraulics of the channel affected by sediment transport? ☐ Yes ☐ No

If yes, then fill out Section F (Sediment Transport) of Form 3. If No, then attach your explanation for why sediment transport was not considered.

C. BRIDGE/CULVERT

Flooding Source: Higginbottom Creek & Viney Slough Ditch

Name of Structure: Sta 90 Ingels Road

1. This revision reflects (check one):

☐ Bridge/culvert not modeled in the FIS

☐ Modified bridge/culvert previously modeled in the FIS

☒ Revised analysis of bridge/culvert previously modeled in the FIS

2. Hydraulic model used to analyze the structure (e.g., HEC-2 with special bridge routine, WSPRO, HY8): _____
If different than hydraulic analysis for the flooding source, justify why the hydraulic analysis used for the flooding source could not analyze the structures. Attach justification.

3. Attach plans of the structures certified by a registered professional engineer. The plan detail and information should include the following (check the information that has been provided):

☒ Dimensions (height, width, span, radius, length)
☐ Shape (culverts only)
☐ Material
☐ Beveling or Rounding
☐ Wing Wall Angle
☐ Skew Angle
☒ Distances Between Cross Sections
☐ Erosion Protection
☒ Low Chord Elevations – Upstream and Downstream
☒ Top of Road Elevations – Upstream and Downstream
☒ Structure Invert Elevations – Upstream and Downstream
☒ Stream Invert Elevations – Upstream and Downstream
☒ Cross-Section Locations

4. Sediment Transport Considerations

Are the hydraulics of the structure affected by sediment transport? ☐ Yes ☒ No

If Yes, then fill out Section F (Sediment Transport) of Form 3. If no, then attach an explanation.

D. DAM/BASIN

Flooding Source: _____
Name of Structure: _____

1. This request is for (check one): ☐ Existing dam/basin ☐ New dam/basin ☐ Modification of existing dam/basin

2. The dam/basin was designed by (check one): ☐ Federal agency ☐ State agency ☐ Private organization ☐ Local government agency

   Name of the agency or organization: _____

3. The Dam was permitted as (check one): ☐ Federal Dam ☐ State Dam

   Provide the permit or identification number (ID) for the dam and the appropriate permitting agency or organization

   Permit or ID number _____ Permitting Agency or Organization _____

   a. ☐ Local Government Dam ☐ Private Dam

   Provided related drawings, specification and supporting design information.

4. Does the project involve revised hydrology? ☐ Yes ☐ No

   If Yes, complete the Riverine Hydrology & Hydraulics Form (Form 2).

   Was the dam/basin designed using critical duration storm? (must account for the maximum volume of runoff)

   ☐ Yes, provide supporting documentation with your completed Form 2.

   ☐ No, provide a written explanation and justification for not using the critical duration storm.

5. Does the submittal include debris/sediment yield analysis? ☐ Yes ☐ No

   If Yes, then fill out Section F (Sediment Transport). If No, then attach your explanation for why debris/sediment analysis was not considered?

6. Does the Base Flood Elevation behind the dam/basin or downstream of the dam/basin change? ☐ Yes ☐ No

   If Yes, complete the Riverine Hydrology & Hydraulics Form (Form 2) and complete the table below.

FREQUENCY (% annual chance)	Stillwater Elevation Behind the Dam/Basin FIS	REVISED
10-year (10%)	_____	_____
50-year (2%)	_____	_____
100-year (1%)	_____	_____
500-year (0.2%)	_____	_____
Normal Pool Elevation	_____	_____

7. Please attach a copy of the formal Operation and Maintenance Plan

E. LEVEE/FLOODWALL

1. System Elements

   a. This Levee/Floodwall analysis is based on (check one): ☐ upgrading of an existing levee/floodwall system ☐ a newly constructed levee/floodwall system ☐ reanalysis of an existing levee/floodwall system

   b. Levee elements and locations are (check one):

   ☐ earthen embankment, dike, berm, etc. Station _____ to _____
   ☐ structural floodwall Station _____ to _____
   ☐ Other (describe): Station _____ to _____

   c. Structural Type (check one): ☐ monolithic cast-in place reinforced concrete ☐ reinforced concrete masonry block ☐ sheet piling ☐ Other (describe): _____

   d. Has this levee/floodwall system been certified by a Federal agency to provide protection from the base flood?

   ☐ Yes ☐ No

   If Yes, by which agency? _____

e. Attach certified drawings containing the following information (indicate drawing sheet numbers):

1. Plan of the levee embankment and floodwall structures. Sheet Numbers: _____
2. A profile of the levee/floodwall system showing the Base Flood Elevation (BFE), levee and/or wall crest and foundation, and closure locations for the total levee system. Sheet Numbers: _____
3. A profile of the BFE, closure opening outlet and inlet invert elevations, type and size of opening, and kind of closure. Sheet Numbers: _____
4. A layout detail for the embankment protection measures. Sheet Numbers: _____
5. Location, layout, and size and shape of the levee embankment features, foundation treatment, Floodwall structure, closure structures, and pump stations. Sheet Numbers: _____

2. Freeboard

a. The minimum freeboard provided above the BFE is:

Riverine

3.0 feet or more at the downstream end and throughout	☐ Yes	☐ No
3.5 feet or more at the upstream end	☐ Yes	☐ No
4.0 feet within 100 feet upstream of all structures and/or constrictions	☐ Yes	☐ No

Coastal

1.0 foot above the height of the one percent wave associated with the 1%-annual-chance stillwater surge elevation or maximum wave runup (whichever is greater).	☐ Yes	☐ No
2.0 feet above the 1%-annual-chance stillwater surge elevation	☐ Yes	☐ No

Please note, occasionally exceptions are made to the minimum freeboard requirement. If an exception is requested, attach documentation addressing Paragraph 65.10(b)(1)(ii) of the NFIP Regulations.

If No is answered to any of the above, please attach an explanation.

b. Is there an indication from historical records that ice-jamming can affect the BFE? ☐ Yes ☐ No

If Yes, provide ice-jam analysis profile and evidence that the minimum freeboard discussed above still exists.

3. Closures

a. Openings through the levee system (check one): ☐ exists ☐ does not exist

If opening exists, list all closures:

Channel Station	Left or Right Bank	Opening Type	Highest Elevation for Opening Invert	Type of Closure Device

(Extend table on an added sheet as needed and reference)

Note: Geotechnical and geologic data

In addition to the required detailed analysis reports, data obtained during field and laboratory investigations and used in the design analysis for the following system features should be submitted in a tabulated summary form. (Reference U.S. Army Corps of Engineers [USACE] EM-1110-2-1906 Form 2086.)

4. Embankment Protection

a. The maximum levee slope land side is: _____

b. The maximum levee slope flood side is: _____

c. The range of velocities along the levee during the base flood is: _____ (min.) to _____ (max.)

d. Embankment material is protected by (describe what kind): _____

e. Riprap Design Parameters (check one): ☐ Velocity ☐ Tractive stress
Attach references

Reach		Sideslope	Flow Depth	Velocity	Curve or Straight	Stone Riprap			Depth of Toedown
						D_{100}	D_{50}	Thickness	
Sta	to								
Sta	to								
Sta	to								
Sta	to								
Sta	to								
Sta	to								

(Extend table on an added sheet as needed and reference each entry)

f. Is a bedding/filter analysis and design attached? ☐ Yes ☐ No

g. Describe the analysis used for other kinds of protection used (include copies of the design analysis):

Attach engineering analysis to support construction plans.

5. Embankment And Foundation Stability

a. Identify locations and describe the basis for selection of critical location for analysis:

_____

☐ Overall height: Sta.: _____, height _____ ft.

☐ Limiting foundation soil strength:

Strength ϕ = _____ degrees, c = _____ psf

Slope: SS = _____ (h) to _____ (v)

(Repeat as needed on an added sheet for additional locations)

b. Specify the embankment stability analysis methodology used (e.g., circular arc, sliding block, infinite slope, etc.):

_____

c. Summary of stability analysis results:

E. LEVEE/FLOODWALL (CONTINUED)

5. Embankment And Foundation Stability (continued)

Case	Loading Conditions	Critical Safety Factor	Criteria (Min.)
I	End of construction		1.3
II	Sudden drawdown		1.0
III	Critical flood stage		1.4
IV	Steady seepage at flood stage		1.4
VI	Earthquake (Case I)		1.0

(Reference: USACE EM-1110-2-1913 Table 6-1)

d. Was a seepage analysis for the embankment performed? ☐ Yes ☐ No

If Yes, describe methodology used:

e. Was a seepage analysis for the foundation performed? ☐ Yes ☐ No

f. Were uplift pressures at the embankment landside toe checked? ☐ Yes ☐ No

g. Were seepage exit gradients checked for piping potential? ☐ Yes ☐ No

h. The duration of the base flood hydrograph against the embankment is _____ hours.

Attach engineering analysis to support construction plans.

6. Floodwall And Foundation Stability

a. Describe analysis submittal based on Code (check one): ☐ UBC (1988) ☐ Other (specify): _____

b. Stability analysis submitted provides for: ☐ Overturning ☐ Sliding If not, explain: _____

c. Loading included in the analyses were: ☐ Lateral earth @ P_A = _____ psf; P_p = _____ psf

☐ Surcharge-Slope @ _____, ☐ surface _____ psf

☐ Wind @ P_w = _____ psf

☐ Seepage (Uplift); _____ ☐ Earthquake @ P_{eq} = _____ %g

☐ 1%-annual-chance significant wave height: _____ ft.

☐ 1%-annual-chance significant wave period: _____ sec.

d. Summary of Stability Analysis Results: Factors of Safety.
Itemize for each range in site layout dimension and loading condition limitation for each respective reach.

Loading Condition	Criteria (Min)		Sta	To	Sta	To
	Overturn	Sliding	Overturn	Sliding	Overturn	Sliding
Dead & Wind	1.5	1.5				
Dead & Soil	1.5	1.5				
Dead, Soil, Flood, & Impact	1.5	1.5				
Dead, Soil, & Seismic	1.3	1.3				

(Ref: FEMA 114 Sept 1986; USACE EM 1110-2-2502)
Note: (Extend table on an added sheet as needed and reference)

E. LEVEE/FLOODWALL (CONTINUED)

6. Floodwall And Foundation Stability (continued)

e. Foundation bearing strength for each soil type:

Bearing Pressure	Sustained Load (psf)	Short Term Load (psf)
Computed design maximum		
Maximum allowable		

f. Foundation scour protection ☐ is, ☐ is not provided. If provided, attach explanation and supporting documentation:

Attach engineering analysis to support construction plans.

7. Settlement

a. Has anticipated potential settlement been determined and incorporated into the specified construction elevations to maintain the established freeboard margin? ☐ Yes ☐ No

b. The computed range of settlement is _____ ft. to _____ ft.

c. Settlement of the levee crest is determined to be primarily from : ☐ Foundation consolidation ☐ Embankment compression ☐ Other (Describe): _____

d. Differential settlement of floodwalls ☐ has ☐ has not been accommodated in the structural design and construction.

Attach engineering analysis to support construction plans.

8. Interior Drainage

a. Specify size of each interior watershed:

Draining to pressure conduit: _____ acres
Draining to ponding area: _____ acres

b. Relationships Established

Ponding elevation vs. storage ☐ Yes ☐ No
Ponding elevation vs. gravity flow ☐ Yes ☐ No
Differential head vs. gravity flow ☐ Yes ☐ No

c. The river flow duration curve is enclosed: ☐ Yes ☐ No

d. Specify the discharge capacity of the head pressure conduit: _____ cfs

e. Which flooding conditions were analyzed?

- Gravity flow (Interior Watershed) ☐ Yes ☐ No
- Common storm (River Watershed) ☐ Yes ☐ No
- Historical ponding probability ☐ Yes ☐ No
- Coastal wave overtopping ☐ Yes ☐ No

If No for any of the above, attach explanation.

e. Interior drainage has been analyzed based on joint probability of interior and exterior flooding and the capacities of pumping and outlet facilities to provide the established level of flood protection. ☐ Yes ☐ No If No, attach explanation.

g. The rate of seepage through the levee system for the base flood is _____ cfs

h. The length of levee system used to drive this seepage rate in item g: _____ ft.

E. LEVEE/FLOODWALL (CONTINUED)

8. Interior Drainage (continued)

i. Will pumping plants be used for interior drainage? ☐ Yes ☐ No

If Yes, include the number of pumping plants: _____ For each pumping plant, list:

	Plant #1	Plant #2
The number of pumps		
The ponding storage capacity		
The maximum pumping rate		
The maximum pumping head		
The pumping starting elevation		
The pumping stopping elevation		
Is the discharge facility protected?		
Is there a flood warning plan?		
How much time is available between warning and flooding?		

Will the operation be automatic? ☐ Yes ☐ No

If the pumps are electric, are there backup power sources? ☐ Yes ☐ No

(Reference: USACE EM-1110-2-3101, 3102, 3103, 3104, and 3105)

Include a copy of supporting documentation of data and analysis. Provide a map showing the flooded area and maximum ponding elevations for all interior watersheds that result in flooding.

9. Other Design Criteria

a. The following items have been addressed as stated:

Liquefaction ☐ is ☐ is not a problem

Hydrocompaction ☐ is ☐ is not a problem

Heave differential movement due to soils of high shrink/swell ☐ is ☐ is not a problem

b. For each of these problems, state the basic facts and corrective action taken:

Attach supporting documentation

c. If the levee/floodwall is new or enlarged, will the structure adversely impact flood levels and/or flow velocities floodside of the structure?
☐ Yes ☐ No Attach supporting documentation

d. Sediment Transport Considerations:

Was sediment transport considered? ☐ Yes ☐ No
If Yes, then fill out Section F (Sediment Transport). If No, then attach your explanation for why sediment transport was not considered.

10. Operational Plan And Criteria

a. Are the planned/installed works in full compliance with Part 65.10 of the NFIP Regulations? ☐ Yes ☐ No

b. Does the operation plan incorporate all the provisions for closure devices as required in Paragraph 65.10(c)(1) of the NFIP regulations?
☐ Yes ☐ No

c. Does the operation plan incorporate all the provisions for interior drainage as required in Paragraph 65.10(c)(2) of the NFIP regulations?
☐ Yes ☐ No If the answer is No to any of the above, please attach supporting documentation.

E. LEVEE/FLOODWALL (CONTINUED)

11. Maintenance Plan

Please attach a copy of the fomal maintenance plan for the levee/floodwall

12. Operations and Maintenance Plan

Please attach a copy of the formal Operations and Maintenance Plan for the levee/floodwall.

CERTIFICATION OF THE LEVEE DOCUMENTION

This certification is to be signed and sealed by a licensed registered professional engineer authorized by law to certify elevation information data, hydrologic and hydraulic analysis, and any other supporting information as per NFIP regulations paragraph 65.10(e) and as described in the MT-2 Forms Instructions. All documents submitted in support of this request are correct to the best of my knowledge. I understand that any false statement may be punishable by fine or imprisonment under Title 18 of the United States Code, Section 1001.

Certifier's Name: _____ License No.: _____ Expiration Date: _____

Company Name: _____ Telephone No.: _____ Fax No.: _____

Signature: _____ Date: _____ E-Mail Address: _____

F. SEDIMENT TRANSPORT

Flooding Source: _____

Name of Structure: _____

If there is any indication from historical records that sediment transport (including scour and deposition) can affect the Base Flood Elevation (BFE); and/or based on the stream morphology, vegetative cover, development of the watershed and bank conditions, there is a potential for debris and sediment transport (including scour and deposition) to affect the BFEs, then provide the following information along with the supporting documentation:

Sediment load associated with the base flood discharge: Volume _____ acre-feet

Debris load associated with the base flood discharge: Volume _____ acre-feet

Sediment transport rate _____ (percent concentration by volume)

Method used to estimate sediment transport: _____

Most sediment transport formulas are intended for a range of hydraulic conditions and sediment sizes; attach a detailed explanation for using the selected method.

Method used to estimate scour and/or deposition: _____

Method used to revise hydraulic or hydrologic analysis (model) to account for sediment transport: _____

Please note that bulked flows are used to evaluate the performance of a structure during the base flood; however, FEMA does not map BFEs based on bulked flows.

If a sediment analysis has not been performed, an explanation as to why sediment transport (including scour and deposition) will not affect the BFEs or structures must be provided.