



September 15, 2010

Mr. Christopher Meyer  
CEC Project Manager  
Attn: Docket No. 08-AFC-13  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814-5512

**DOCKET**  
**08-AFC-13**

DATE	SEP 15 2010
RECD.	SEP 15 2010

RE: Calico Solar (formerly Solar One) Project (08-AFC-13)  
Applicant's Submittal of Response to Sierra Club Data Requested on September 14, 2010

Dear Mr. Meyer:

Tessera Solar hereby submits Data Requested by Sierra Club on September 14, 2010. I certify under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge.

Sincerely,

Felicia L. Bellows  
Vice President of Development

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**Response to Sierra Club's Information Request, docketed September 14, 2010**

**1. Please provide all of the data used to support site-specific conclusions about habitat quality. With these data, please provide:**

- a. A description of all specific metrics observed and recorded on the Project site that the Applicant used to determine habitat quality. These may include, but are not limited to, tortoise density, tortoise burrows, vegetation cover, type of vegetation, soil composition, slope, aspect, temperature, wind, and cloud cover.**

*Response: All of the specific metrics used to define habitat quality were included in Theresa Miller's declaration (docketed September 13, 2010). A summary of the tortoise density and tortoise burrow information was provided in the Desert Tortoise (DT) Plan (docketed August 4, 2010). Survey results for 2010 were docketed May 18, 2010. Data sheets and supportive information that includes habitat quality metrics has also already been provided (Applicant's Submittal of Results of 2010 Desert Tortoise Surveys, docketed August 11, 2010). Information included on data sheets provided in the August 11, 2010 docketing (e.g., vegetation cover, type of vegetation, soil composition, slope aspect, temperature, wind and cloud cover) were recorded per cell not per data sheet. This is consistent with the USFWS 2010 survey protocol. Additionally, temperature, sky and wind data are summarized for each day in Appendix B (Survey Effort Table) of the survey results (docketed August 11, 2010).*

- b. The geographic locations associated with the data that are provided (including geographic coordinates if available).**

*Response: Per Theresa Miller's testimony docketed September 13, 2010 publicly available, non-restricted information with geographic locations and/or geographic coordinates can be obtained by contacting Camille Lill at URS Corporation (Camille\_lill@urscorp.com). See response to question 2 for more information. GPS coordinates of observed desert tortoise and other sign are available on the data sheets (Attachment A-1) and burrow data spreadsheets (Attachment A-2) of the survey results (docketed August 11, 2010).*

- c. The names of the surveyor(s) that collected the data, and their qualifications (if not provided previously).**

*Response: All surveyors' information, qualifications and resumes have been previously provided (see Attachment B (Survey Effort Table) and Attachment C (Resumes of the Surveyors) of the 2010 desert tortoise survey results docketed May 18, 2010).*

**2. Theresa Miller's written testimony submitted by the Applicant on September 13, 2010 stated, "Data that was prepared by URS for the desktop habitat modeling is available and can be obtained by emailing Camille Lill at URS (camille\_lill@urscorp.com) and requesting the specific data layers. Additionally, data that was created by URS and provided to BLM has been released for public use by BLM and can be requested from Camille Lill."** (Miller Testimony, p.2)

- a. Please provide the data used to prepare the desktop habitat modeling.**

*Response: Since this data is large, electronic GIS information it is not docketable. As noted in our testimony docketed August 13, 2010, this information is available by request from Camille Lill.*

- b. Please provide the model's output information that the Applicant relied on to create the delineation between the high quality habitat and the medium quality habitat.**

*Response: All GIS data used to delineate habitat quality has been printed on maps included in the Applicant's filings (in either the AFC – docketed December 2, 2008 or the DT Translocation Plan – docketed August 4, 2010). The source and date for each layer is listed in the "Source" area on each map. For your convenience here is a list of data used to help evaluate habitat quality:*

*URS generated data available upon request:*

1. *Desert tortoise survey results (DT locations and burrows)*
2. *URS mapped vegetation (2008)*

*Publicly available data:*

1. *USGS topographic data (including slope and general landform type) (2001)*
2. *USDA STATSGO soil information (2001)*
3. *USGS desert tortoise habitat suitability model (2009)*
4. *BLM (ACECs, wilderness areas, land ownership)*

*Restricted data not available for release but parties can contact these entities to purchase or request data:*

1. *POWERmap transmission line information (2009)*
2. *CNDDDB and other sensitive plant and animal locations (2008)*

**3. The following questions relate to the Applicant's submittal of 2010 Desert Tortoise survey results (i.e., URS 2010 May 17):**

- a. On 5 August 2010, Theresa Miller testified that "We conducted surveys -- ten meter protocol surveys on the 8,230 acre original project boundary plus a 1,000 foot buffer of the project with 10-meter transects according to the 2010 U.S. Fish and Wildlife protocol" (page 35 of the transcript). The Applicant's 2010 survey report does not include information on tortoises or tortoise burrows that were detected in the 1,000-foot buffer (see Tables 1 and 2; Figures 1 through 4 of the survey report). Please provide the data for the tortoises and tortoise sign that were detected within the 1,000-foot buffer.**

*Response: The statement was an error. Per USFWS 2010 survey protocol, no buffer zone is required nor was conducted during protocol level surveys conducted in 2010. Limited data was collected outside of the boundary during the 2010 surveys and has been included, where available. Data sheets were not prepared for this information. Additionally, desert tortoise information was collected in 2007 and 2008 during the probabilistic sampling surveys, and as discussed previously, it was not included by agency request because it was not relevant to the current analysis.*

- b. Several of the data forms provided in Appendix 1 of the 2010 desert tortoise survey results list two biologists in the "Biologist" field. For example, the first form (e.g., for DT#1) identifies Rick Bailey and Jerry Monks as the biologists associated with the detection of DT#1. Please clarify whether some transect lines were surveyed by two biologists (as suggested by several of the data forms). If each transect was surveyed by a single biologist, please indicate the biologist that detected, and derived data, for each live tortoise that was detected (e.g., for DT#1, was it Rick Bailey or Jerry Monks?).**

*Response: For tortoise located by a single biologist, the biology task lead would be asked to come verify the tortoise location and assist in conducting the visual health assessment. This is why two names are listed on many of the data forms.*

**c. Please provide the data missing from the data forms in Appendix 1, as outlined below:**

Variable	Tortoise number (DT #)
Time	82,88
Temperature	6,7,8,9,19,27,34,38,39,45,48,49,50,51,56,57,58,64,65,70,86 94,96,97,98,99,100,101,102,103,104
Cloud cover	34,96,97,98,99,100
Wind	34,45,56,57,58,96,97,98,99,100
Slope	2,6,17,19,20,21,22,24,26,27,53,55,66,79,81,83,86,92,96, 97,98,99
Aspect	2,6,14,15,16,17,19,20,21,26,27,34,35,36,37,53,55,66,79, 81,83,86,92,96,97,98,99

*Response: Time, temperature, cloud cover, wind, slope and aspect were recorded by survey grid cell and not recorded on each data sheet. Some biologists recorded this information per data sheet anyway, but it was not required by the USFWS 2010 protocol.*

**4. Appendix 2 of the 2010 desert tortoise survey report provides a table with tortoise burrow data. Please clarify the following:**

- a. Do the tortoise numbers provided in the 10<sup>th</sup> column (i.e., the one labeled “Tortoise #”) correspond with the tortoise numbers provided in Appendix 1? If yes, please clarify why the geographic coordinates provided in Appendix 1 do not match those provided in Appendix 2.**

*Response: Yes. The hand-written data sheets provided in Appendix 1 include location coordinates copied in the field looking at the GPS units. All data sheets in Appendix 1 were cross-checked and verified in GIS. The electronic spreadsheet provided in Appendix 2 contains the final, cross-checked information for all tortoise locations. Where there were discrepancies, the electronic GPS file (Appendix 2) took precedence over the hand-written locational coordinate information copied from the GPS unit in the field (Appendix 1).*

- b. Was there any attempt to distinguish winter burrows from summer burrows? If yes, please identify the winter burrows and discuss how they were distinguished from summer burrows.**

*Response: No. This is not required per USFWS survey protocol.*

**c. Please clarify whether a data form (i.e., the ones provided in Appendix 1) was completed for each of the live tortoises listed in Appendix 2.**

*Response: Yes, a data form was completed for all live tortoises within the survey protocol areas. For tortoise outside of the project boundary, or where not all assessment information could be recorded because the tortoise was in a burrow or the surveyor was otherwise unable to assess the tortoise, a form was not created.*

**5. Please provide a spreadsheet, copies of data sheets, or other document(s) that provides adequate information to establish the personnel that surveyed each transect, and the date(s) the transects were surveyed. We understand the 8,230- acre Project site and 1,000-foot buffer was surveyed between 29 March and 15 April 2009. We further understand the names of the surveyors were listed in the 2010 survey report. However, we require more specific information on the survey teams and locations for these dates. The table below serves as a template for the type of data we seek.**

Section	Transect line	Date	Start coordinate	End coordinate	Surveyor(s)
6	1	3/29	589929, 3689017	588378, 3689017	TR, BD
6	2	4/1	589929, 3688867	588378, 3688867	EM, JT

*Response: The Applicant has provided surveyor information, qualifications and resumes for each surveyor (2010 desert tortoise survey results docketed May 18, 2010). In addition, all data sheets included in Applicant's Response to Sierra Club Data Requests (docketed August 11, 2010) indicate the surveyor collecting the information. The Applicant feels identifying surveyor information down to the transect level is beyond the narrow scope of assessing habitat quality and not required by any protocols that the applicant was requested to follow by the resource agencies.*

**6. Please provide a Project site map that includes data from both the 2007-2008 tortoise surveys and the 2010 tortoise surveys, and the other sensitive biological resources that were detected on the Project site (e.g., bighorn sheep sign, rare plants, burrowing owls).**

*Response: Resource agencies requested the applicant only include 2010 tortoise surveys data since this information was collected per USFWS 100% protocol level surveys, and in 2007 and 2008 probabilistic sampling surveys were conducted and thus are not directly comparable. All other biological resources detected on the project site (including all locations of bighorn sheep sign, rare plants and burrowing owls), including anything*

*found during the DT 2010 surveys are identified on the “Biological Resources Avoided Map” (Ex. 82-C to Applicant’s Rebuttal Testimony docketed July 29, 2010).*

**7.** There are several threats to desert tortoises that could exist to the desert tortoises on the Project site. For example, several research studies have demonstrated a zone of depression adjacent to a road, and thus roads are considered a threat to desert tortoises. Threats to desert tortoises are summarized in: Boarman WI. 2002. Threats to Desert Tortoise Populations: A Critical Review of the Literature. U.S. Geological Survey, Western Ecological Research Center. Sacramento (CA): 86p. Boarman’s paper was submitted as an exhibit, and is available at:  
[http://www.dmg.gov/documents/RVW\\_Threats\\_to\\_DT\\_Pops\\_A\\_Crit\\_Rvw\\_of\\_the\\_Lit\\_USGS\\_080902.pdf](http://www.dmg.gov/documents/RVW_Threats_to_DT_Pops_A_Crit_Rvw_of_the_Lit_USGS_080902.pdf).

- a.** Please discuss the various threats to desert tortoises that the Applicant considered in making its determination regarding the delineation of habitat quality. If the Applicant did not consider such threats, please explain why not.
- b.** Please explain how the Applicant identified those threats, if at all, on the Project site.
- c.** Please describe the site-specific occurrences of those various threats across the Project site and the amount of variability of those threats.

*Response to a-c: Threats to desert tortoise was not a differentiating factor in evaluating habitat quality. While it was noted that the higher habitat quality was found further away from known threat areas, the Applicant based their habitat quality assessment on the metrics described in Miller’s testimony (docketed September 13, 2010). The DT plan does, however, look at threats when assessing translocation areas.*

**8.** The Commission required the applicant in the Ivanpah proceeding to provide a study of the drainage, erosion, and sediment control impacts to the alluvial fan that would result from the Project. “Major site alterations, as would result from ISEGS, have the potential to modify stormwater drainage patterns and flowrates, and result in severe erosion impacts which would adversely affect the project site.” (Staff’s Status Report No. 9, May 18, 2009.) Please provide a similar study of the impacts to drainage, erosion, and sediment control resulting from the Calico Project. If no such study exists, please explain why the Applicant has not prepared a study similar to the Study that Staff required in the Ivanpah proceeding.

*Response: On January 8, 2010, the Applicant docketed the Huitt-Zollars Existing Condition Hydrologic and Hydraulic Study (April 2009) (“Huitt-*

*Zollars Study"). On September 8 and September 13, 2010, the Applicant docketed the report of Dr. Howard Chang and the Declarations of Matt Moore and Robert Byall, which explain why the Calico Solar Project, as reduced in size, moved away from the base of the Cady Mountains, and otherwise modified, would not cause significant drainage, erosion or sediment control impacts.*

**9. Dr. Howard Chang's written testimony submitted by the Applicant on September 13, 2010 stated, "The [sic] analyze the hydraulics of flow, erosion and sedimentation, a study has been made to provide the dynamics of stream flow and potential stream channel changes including general scour and local scour for the Calico project site." (Chang Testimony, p.10.)**

**a. Please provide the study referenced by Dr. Chang.**

*Response: As explained in Dr. Chang's written testimony, Dr. Chang relied on the Huitt-Zollars study referenced in response 8. As explained summarized in his September 13, 2010 Assessment, Dr. Chang analysis and conclusions relied upon this information. The input-output files and the user's manual for the model used are attached.*

**b. Please provide an analysis and explanation of the changes to hydrology, drainage, erosion and sedimentation that would occur as a result of the reduced footprint project scenarios 5.5 and 6.**

*Response: As Dr. Chang has explained, with elimination of detention basins, reduced footprint Scenarios 5.5 and 6 would not significantly alter existing conditions. The SunCatcher pedestals are too small, at 3.14 square feet per 0.28 acre, to cause significant impacts.*

**10. Dr. Howard Chang's written testimony submitted by the Applicant on September 13, 2010 stated, "the installation of SunCatchers is subject to certain restrictions...(1) Storm water flow depths around the SunCatcher cannot exceed 1.5 ft, (2) the maximum allowable scour depth around the SunCatcher pedestal is 4 ft, and (3) Sediment deposition within the SunCatcher filled during a 100-year event cannot exceed 6 inches..." (Chang Testimony, p.10.)**

**a. Please provide a map or description of the areas within the newly proposed footprints that would trigger these restrictions.**

*Response: The stormwater management design parameters for the SunCatchers are not based on maximum flow rates but rather maximum flow depth and flow velocity. In order to prevent inundation of electrical equipment in the Suncatcher, the Applicant has specified a maximum flow depth of 1.5 feet. Flow velocity is related to the scour potential at each SunCatcher foundation. The Applicant has specified a maximum scour*

*depth of 4 feet, which equals a flow velocity of approximately 7 feet-per-second based upon the existing soil type and terrain. See Applicant's Response to CEC Email Dated June 4th, 2010, Calico Solar (docketed June 11, 2010).*

*The Huitt-Zollars Study analyzed the alluvial fan for flow velocity, scour, and flow depth for the 100-year storm. The report identified three hazard zones for the alluvial fan north of the BNSF railroad. The highest hazard zone ("Zone 1") was identified as the northern 1/3 of the project area at the foot of the Cady Mountains. This area produces the flow depths and scour potential that approach the maximums specified by the Applicant. This hydrology report indicates this area has nominal flood depths of 1-2 feet and scour potential of 4-5 feet. The Huitt-Zollars Study also concluded that some areas south of the railroad will likely exceed a 2 foot depth for the 100-year storm.*

*Under Scenarios 5.5 and 6, few or no SunCatchers would be located in Zone 1. In addition, as explained in the Declaration of Robert Byall docketed on September 13, 2010, SunCatcher installation will be excluded from floodways that will produce a combined local and general scour depth greater than four feet during a 100-year event and/or a 100-year flow depth of more than 1.5 feet.*

**b. For each scenario, please provide an estimate of the number of SunCatchers that would be subject to the restrictions discussed by Dr. Chang.**

*Response: The number of SunCatchers that would be subject to the restrictions discussed by Dr. Chang has not been calculated. The number is expected to be very low for the reasons described above.*



**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT  
COMMISSION OF THE STATE OF CALIFORNIA  
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1-800-822-6228 – WWW.ENERGY.CA.GOV**

**APPLICATION FOR CERTIFICATION**

**For the CALICO SOLAR (Formerly SES Solar One)**

**Docket No. 08-AFC-13**

**PROOF OF SERVICE  
(Revised 8/9/10)**

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## DECLARATION OF SERVICE

I, Darin Neufeld, declare that on September 15, 2010, I served and filed copies of the attached Applicant's Submittal of Response to Sierra Club Data Requested on September 14, 2010. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [www.energy.ca.gov/sitingcases/solarone].

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

*(Check all that Apply)*

### FOR SERVICE TO ALL OTHER PARTIES:

- sent electronically to all email addresses on the Proof of Service list;
- by personal delivery;
- by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "email preferred."

*AND*

### FOR FILING WITH THE ENERGY COMMISSION:

- sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (*preferred method*);

*OR*

- depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION  
Attn: Docket No. 08-AFC-13  
1516 Ninth Street, MS-4  
Sacramento, CA 95814-5512  
[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Original Signed By

Darin Neufeld

\*\*\*\*\*
\* FLUVIAL-12 SIMULATION OF RIVER HYDRAULICS, \*
\* SEDIMENT TRANSPORT AND RIVER CHANNEL CHANGES \*
\* FOR USE BY HOWARD H. CHANG \*
\*\*\*\*\*

THIS PROGRAM IS DEVELOPED AND FURNISHED BY HOWARD H. CHANG AND IS ACCEPTED AND USED BY THE RECIPIENT UPON THE EXPRESS UNDERSTANDING THAT THE DEVELOPER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE ACCURACY, COMPLETENESS, RELIABILITY, USABILITY, OR SUITABILITY FOR ANY PARTICULAR PURPOSE OF THE INFORMATION AND DATA CONTAINED IN THIS PROGRAM OR FURNISHED IN CONNECTION THEREWITH, AND THE DEVELOPER SHALL BE UNDER NO LIABILITY WHATSOEVER TO ANY PERSON BY REASON OF ANY USE MADE THEREOF.

T1 CALICO SITE, TYPICAL WASH ON ALLUVIAL FAN

T2

T3

G1 1.00 31.00 60.00 3.00 0.50 0.00 0.03 16.50 30.00 300.00

G2 78.00 3.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

G2 5.00 0.00 40.00 1.00 40.00 31.00

G3 0.05 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

G4 10000.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

G5 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00

GS 0.13 0.14 0.26 0.20 0.45 0.20 0.73 0.20 2.20 0.26

GQ 4.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

GQ 2410.20 5.00 2410.78 30.00 2411.00 75.00 2411.30 100.00

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X3 27.00

GR 2411.20 5.00 2411.18 5.88 2411.15 6.75 2411.13 7.62 2411.10 8.50

GR 2411.08 9.38 2411.05 10.25 2411.03 11.12 2411.00 12.00 2410.83 12.67

GR 2410.67 13.33 2410.50 14.00 2410.20 15.00 2410.17 15.83 2410.13 16.67

GR 2410.10 17.50 2410.07 18.33 2410.03 19.17 2410.00 20.00 2410.03 20.83

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GR 2411.10 17.50 2411.07 18.33 2411.03 19.17 2411.00 20.00 2411.03 20.83

GR 2411.07 21.67 2411.10 22.50 2411.13 23.33 2411.17 24.17 2411.20 25.00

GR 2411.50 26.00 2411.67 26.67 2411.83 27.33 2412.00 28.00 2412.03 28.86

GR 2412.06 29.71 2412.09 30.57 2412.11 31.43 2412.14 32.29 2412.17 33.14

GR 2412.20 34.00

X1 3.00 9.00 12.00 28.00 0.00 0.00 20.00 0.00 2.00 0.00

X3 27.00

GR 2413.20 5.00 2413.18 5.88 2413.15 6.75 2413.13 7.62 2413.10 8.50

GR 2413.08 9.38 2413.05 10.25 2413.03 11.12 2413.00 12.00 2412.83 12.67

GR 2412.67 13.33 2412.50 14.00 2412.20 15.00 2412.17 15.83 2412.13 16.67

GR 2412.10 17.50 2412.07 18.33 2412.03 19.17 2412.00 20.00 2412.03 20.83

GR 2412.07 21.67 2412.10 22.50 2412.13 23.33 2412.17 24.17 2412.20 25.00

GR 2412.50 26.00 2412.67 26.67 2412.83 27.33 2413.00 28.00 2413.03 28.86

GR 2413.06 29.71 2413.09 30.57 2413.11 31.43 2413.14 32.29 2413.17 33.14

GR 2413.20 34.00

X1 4.00 9.00 12.00 28.00 0.00 0.00 20.00 0.00 3.00 0.00

X3 27.00

GR 2414.20 5.00 2414.18 5.88 2414.15 6.75 2414.13 7.62 2414.10 8.50

GR 2414.08 9.38 2414.05 10.25 2414.03 11.12 2414.00 12.00 2413.83 12.67

GR 2413.67 13.33 2413.50 14.00 2413.20 15.00 2413.17 15.83 2413.13 16.67

GR 2413.10 17.50 2413.07 18.33 2413.03 19.17 2413.00 20.00 2413.03 20.83

GR 2413.07 21.67 2413.10 22.50 2413.13 23.33 2413.17 24.17 2413.20 25.00  
 GR 2413.50 26.00 2413.67 26.67 2413.83 27.33 2414.00 28.00 2414.03 28.86  
 GR 2414.06 29.71 2414.09 30.57 2414.11 31.43 2414.14 32.29 2414.17 33.14  
 GR 2414.20 34.00  
 X1 5.00 9.00 12.00 28.00 0.00 0.00 20.00 0.00 4.00 0.00  
 X3 27.00  
 GR 2415.20 5.00 2415.18 5.88 2415.15 6.75 2415.13 7.62 2415.10 8.50  
 GR 2415.08 9.38 2415.05 10.25 2415.03 11.12 2415.00 12.00 2414.83 12.67  
 GR 2414.67 13.33 2414.50 14.00 2414.20 15.00 2414.17 15.83 2414.13 16.67  
 GR 2414.10 17.50 2414.07 18.33 2414.03 19.17 2414.00 20.00 2414.03 20.83  
 GR 2414.07 21.67 2414.10 22.50 2414.13 23.33 2414.17 24.17 2414.20 25.00  
 GR 2414.50 26.00 2414.67 26.67 2414.83 27.33 2415.00 28.00 2415.03 28.86  
 GR 2415.06 29.71 2415.09 30.57 2415.11 31.43 2415.14 32.29 2415.17 33.14  
 GR 2415.20 34.00  
 X1 6.00 9.00 12.00 28.00 0.00 0.00 20.00 0.00 5.00 0.00  
 X3 27.00  
 GR 2416.20 5.00 2416.18 5.88 2416.15 6.75 2416.13 7.62 2416.10 8.50  
 GR 2416.08 9.38 2416.05 10.25 2416.03 11.12 2416.00 12.00 2415.83 12.67  
 GR 2415.67 13.33 2415.50 14.00 2415.20 15.00 2415.17 15.83 2415.13 16.67  
 GR 2415.10 17.50 2415.07 18.33 2415.03 19.17 2415.00 20.00 2415.03 20.83  
 GR 2415.07 21.67 2415.10 22.50 2415.13 23.33 2415.17 24.17 2415.20 25.00  
 GR 2415.50 26.00 2415.67 26.67 2415.83 27.33 2416.00 28.00 2416.03 28.86  
 GR 2416.06 29.71 2416.09 30.57 2416.11 31.43 2416.14 32.29 2416.17 33.14  
 GR 2416.20 34.00  
 X1 7.00 9.00 12.00 28.00 0.00 0.00 20.00 0.00 6.00 0.00  
 X3 27.00  
 GR 2417.20 5.00 2417.18 5.88 2417.15 6.75 2417.13 7.62 2417.10 8.50  
 GR 2417.08 9.38 2417.05 10.25 2417.03 11.12 2417.00 12.00 2416.83 12.67  
 GR 2416.67 13.33 2416.50 14.00 2416.20 15.00 2416.17 15.83 2416.13 16.67  
 GR 2416.10 17.50 2416.07 18.33 2416.03 19.17 2416.00 20.00 2416.03 20.83  
 GR 2416.07 21.67 2416.10 22.50 2416.13 23.33 2416.17 24.17 2416.20 25.00  
 GR 2416.50 26.00 2416.67 26.67 2416.83 27.33 2417.00 28.00 2417.03 28.86  
 GR 2417.06 29.71 2417.09 30.57 2417.11 31.43 2417.14 32.29 2417.17 33.14  
 GR 2417.20 34.00  
 X1 8.00 9.00 12.00 28.00 0.00 0.00 20.00 0.00 7.00 0.00  
 X3 27.00  
 GR 2418.20 5.00 2418.18 5.88 2418.15 6.75 2418.13 7.62 2418.10 8.50  
 GR 2418.08 9.38 2418.05 10.25 2418.03 11.12 2418.00 12.00 2417.83 12.67  
 GR 2417.67 13.33 2417.50 14.00 2417.20 15.00 2417.17 15.83 2417.13 16.67  
 GR 2417.10 17.50 2417.07 18.33 2417.03 19.17 2417.00 20.00 2417.03 20.83  
 GR 2417.07 21.67 2417.10 22.50 2417.13 23.33 2417.17 24.17 2417.20 25.00  
 GR 2417.50 26.00 2417.67 26.67 2417.83 27.33 2418.00 28.00 2418.03 28.86  
 GR 2418.06 29.71 2418.09 30.57 2418.11 31.43 2418.14 32.29 2418.17 33.14  
 GR 2418.20 34.00  
 X1 9.00 9.00 12.00 28.00 0.00 0.00 20.00 0.00 8.00 0.00  
 X3 27.00  
 GR 2419.20 5.00 2419.18 5.88 2419.15 6.75 2419.13 7.62 2419.10 8.50  
 GR 2419.08 9.38 2419.05 10.25 2419.03 11.12 2419.00 12.00 2418.83 12.67  
 GR 2418.67 13.33 2418.50 14.00 2418.20 15.00 2418.17 15.83 2418.13 16.67  
 GR 2418.10 17.50 2418.07 18.33 2418.03 19.17 2418.00 20.00 2418.03 20.83  
 GR 2418.07 21.67 2418.10 22.50 2418.13 23.33 2418.17 24.17 2418.20 25.00  
 GR 2418.50 26.00 2418.67 26.67 2418.83 27.33 2419.00 28.00 2419.03 28.86  
 GR 2419.06 29.71 2419.09 30.57 2419.11 31.43 2419.14 32.29 2419.17 33.14  
 GR 2419.20 34.00  
 X1 10.00 9.00 12.00 28.00 0.00 0.00 20.00 0.00 9.00 0.00  
 X3 27.00  
 GR 2420.20 5.00 2420.18 5.88 2420.15 6.75 2420.13 7.62 2420.10 8.50  
 GR 2420.08 9.38 2420.05 10.25 2420.03 11.12 2420.00 12.00 2419.83 12.67  
 GR 2419.67 13.33 2419.50 14.00 2419.20 15.00 2419.17 15.83 2419.13 16.67  
 GR 2419.10 17.50 2419.07 18.33 2419.03 19.17 2419.00 20.00 2419.03 20.83  
 GR 2419.07 21.67 2419.10 22.50 2419.13 23.33 2419.17 24.17 2419.20 25.00  
 GR 2419.50 26.00 2419.67 26.67 2419.83 27.33 2420.00 28.00 2420.03 28.86

GR 2420.06 29.71 2420.09 30.57 2420.11 31.43 2420.14 32.29 2420.17 33.14  
 GR 2420.20 34.00  
 X1 11.00 9.00 12.00 28.00 0.00 0.00 20.00 0.00 10.00 0.00  
 X3 27.00  
 GR 2421.20 5.00 2421.18 5.88 2421.15 6.75 2421.13 7.62 2421.10 8.50  
 GR 2421.08 9.38 2421.05 10.25 2421.03 11.12 2421.00 12.00 2420.83 12.67  
 GR 2420.67 13.33 2420.50 14.00 2420.20 15.00 2420.17 15.83 2420.13 16.67  
 GR 2420.10 17.50 2420.07 18.33 2420.03 19.17 2420.00 20.00 2420.03 20.83  
 GR 2420.07 21.67 2420.10 22.50 2420.13 23.33 2420.17 24.17 2420.20 25.00  
 GR 2420.50 26.00 2420.67 26.67 2420.83 27.33 2421.00 28.00 2421.03 28.86  
 GR 2421.06 29.71 2421.09 30.57 2421.11 31.43 2421.14 32.29 2421.17 33.14  
 GR 2421.20 34.00  
 X1 12.00 9.00 12.00 28.00 0.00 0.00 20.00 0.00 11.00 0.00  
 X3 23.00  
 GR 2422.20 5.00 2422.18 5.88 2422.15 6.75 2422.13 7.62 2422.10 8.50  
 GR 2422.08 9.38 2422.05 10.25 2422.03 11.12 2422.00 12.00 2421.83 12.67  
 GR 2421.67 13.33 2421.50 14.00 2421.20 15.00 2421.17 15.83 2421.13 16.67  
 GR 2421.10 17.50 2421.07 18.33 2421.03 19.17 2421.00 20.00 2421.03 20.83  
 GR 2421.07 21.67 2421.10 22.50 2421.13 23.33 2421.17 24.17 2421.20 25.00  
 GR 2421.50 26.00 2421.67 26.67 2421.83 27.33 2422.00 28.00 2422.07 28.67  
 GR 2422.13 29.33 2422.20 30.00  
 X1 13.00 9.00 12.00 28.00 0.00 0.00 20.00 0.00 12.00 0.00  
 X3 27.00  
 GR 2423.20 5.00 2423.18 5.88 2423.15 6.75 2423.13 7.62 2423.10 8.50  
 GR 2423.08 9.38 2423.05 10.25 2423.03 11.12 2423.00 12.00 2422.83 12.67  
 GR 2422.67 13.33 2422.50 14.00 2422.20 15.00 2422.17 15.83 2422.13 16.67  
 GR 2422.10 17.50 2422.07 18.33 2422.03 19.17 2422.00 20.00 2422.03 20.83  
 GR 2422.07 21.67 2422.10 22.50 2422.13 23.33 2422.17 24.17 2422.20 25.00  
 GR 2422.50 26.00 2422.67 26.67 2422.83 27.33 2423.00 28.00 2423.03 28.86  
 GR 2423.06 29.71 2423.09 30.57 2423.11 31.43 2423.14 32.29 2423.17 33.14  
 GR 2423.20 34.00  
 GS 0.13 0.14 0.26 0.20 0.45 0.20 0.73 0.20 2.20 0.26  
 EJ 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

1

## TI INITIAL BED MATERIAL COMPOSITION

SECTION	SIZE FRACTION MM									
1.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
2.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
3.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
4.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
5.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
6.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
7.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
8.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
9.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
10.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
11.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
12.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261

13.00 0.13 0.139 0.26 0.200 0.45 0.200 0.73 0.200 2.20 0.261

THE ENGELUND-HANSEN SEDIMENT FORMULA IS USED

1

TIME = 1.00 HRS DT = 100 SECS TIME STEP = 0

SECTION W.S.ELEV. WIDTH DEPTH Q V SLOPE D50 QS/Q FR SED. YIELD  
FT FT FT CFS FPS MM 1000 PPM TONS

1.000	2410.83	14.6	0.83	40	4.61 0.012239	0.29	11.66	1.05	0.146E+01
2.000	2411.93	15.4	0.93	40	3.93 0.007723	0.52	15.05	0.85	0.188E+01
3.000	2412.93	15.4	0.93	40	3.93 0.007723	0.52	15.05	0.85	0.188E+01
4.000	2413.93	15.4	0.93	40	3.93 0.007723	0.52	15.05	0.85	0.188E+01
5.000	2414.93	15.4	0.93	40	3.93 0.007723	0.52	15.05	0.85	0.188E+01
6.000	2415.93	15.4	0.93	40	3.93 0.007723	0.52	15.05	0.85	0.188E+01
7.000	2416.93	15.4	0.93	40	3.93 0.007723	0.52	15.05	0.85	0.188E+01
8.000	2417.93	15.4	0.93	40	3.93 0.007723	0.52	15.05	0.85	0.188E+01
9.000	2418.93	15.4	0.93	40	3.93 0.007723	0.52	15.05	0.85	0.188E+01
10.000	2419.93	15.4	0.93	40	3.93 0.007723	0.52	15.05	0.85	0.188E+01
11.000	2420.93	15.4	0.93	40	3.93 0.007723	0.52	15.05	0.85	0.188E+01
12.000	2421.93	15.4	0.93	40	3.93 0.007723	0.52	15.05	0.85	0.188E+01
13.000	2422.93	15.4	0.93	40	3.93 0.007723	0.52	15.05	0.85	0.188E+01

1

TIME = 5.80 HRS DT = 60 SECS TIME STEP = 300

SECTION W.S.ELEV. WIDTH DEPTH Q V SLOPE D50 QS/Q FR SED. YIELD  
FT FT FT CFS FPS MM 1000 PPM TONS

1.000	2410.83	15.2	0.68	40	4.27 0.010091	0.28	14.28	0.96	0.281E+03
2.000	2411.93	15.9	0.68	40	4.22 0.010254	0.28	14.25	0.96	0.282E+03
3.000	2412.93	16.0	0.69	40	4.21 0.010230	0.28	14.20	0.96	0.284E+03
4.000	2413.93	17.2	0.69	40	4.13 0.010501	0.28	14.17	0.97	0.286E+03
5.000	2414.93	16.0	0.70	40	4.21 0.010210	0.28	14.16	0.96	0.287E+03
6.000	2415.93	17.1	0.69	40	4.14 0.010554	0.28	14.30	0.97	0.292E+03
7.000	2416.93	15.8	0.71	40	4.23 0.010232	0.28	14.33	0.96	0.294E+03
8.000	2417.83	16.5	0.71	40	4.20 0.010482	0.28	14.48	0.97	0.298E+03
9.000	2419.33	27.9	0.66	40	3.32 0.009567	0.50	14.62	0.89	0.301E+03
10.000	2419.83	14.7	0.72	40	4.34 0.010205	0.29	14.75	0.97	0.312E+03
11.000	2421.23	27.6	0.73	40	3.34 0.009722	0.51	14.90	0.90	0.315E+03
12.000	2422.03	17.2	0.75	40	4.19 0.011028	0.29	15.02	0.99	0.322E+03
13.000	2422.93	15.4	0.93	40	3.93 0.007731	0.52	15.07	0.85	0.326E+03

ID

12 SECTION 12.00 TIME = 5.80 HRS WS=2422.03 WIDTH = 17.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2422.23	0.00	0.00	5.0	2422.18	0.00	0.00	5.9	2422.15	0.00	0.00	6.8
2422.13	0.00	0.00	7.6	2422.10	0.00	0.00	8.5	2422.08	0.00	0.00	9.4
2422.05	0.00	0.00	10.2	2422.03	0.00	0.00	11.1	2422.01	0.00	0.01	12.0
2421.87	0.00	0.04	12.7	2421.73	0.00	0.06	13.3	2421.58	0.00	0.08	14.0
2421.31	0.00	0.11	15.0	2421.28	0.00	0.12	15.8	2421.28	0.00	0.15	16.7
2421.28	0.00	0.18	17.5	2421.28	0.00	0.21	18.3	2421.28	0.00	0.25	19.2
2421.28	0.00	0.28	20.0	2421.28	0.00	0.25	20.8	2421.28	0.00	0.21	21.7
2421.28	0.00	0.18	22.5	2421.28	0.00	0.15	23.3	2421.28	0.00	0.12	24.2
2421.31	0.00	0.11	25.0	2421.58	0.00	0.08	26.0	2421.73	0.00	0.06	26.7
2421.87	0.00	0.04	27.3	2422.01	0.00	0.01	28.0	2422.07	0.00	0.00	28.7
2422.13	0.00	0.00	29.3	2422.23	0.00	0.00	30.0				

ID

11 SECTION 11.00 TIME = 5.80 HRS WS =2421.23 WIDTH = 27.6

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2421.43	0.00	0.00	5.0	2421.18	0.00	0.00	5.9	2421.15	0.00	0.00	6.8
2421.13	0.00	0.01	7.6	2421.11	0.00	0.01	8.5	2421.08	0.00	0.01	9.4
2421.06	0.00	0.01	10.2	2421.04	0.00	0.01	11.1	2420.98	0.00	-0.02	12.0
2420.84	0.00	0.01	12.6	2420.75	0.00	0.08	13.3	2420.60	0.00	0.10	14.0
2420.50	0.00	0.30	15.0	2420.50	0.00	0.33	15.8	2420.50	0.00	0.36	16.7
2420.50	0.00	0.40	17.5	2420.50	0.00	0.43	18.3	2420.50	0.00	0.46	19.2
2420.50	0.00	0.50	20.0	2420.50	0.00	0.46	20.8	2420.50	0.00	0.43	21.7
2420.50	0.00	0.40	22.5	2420.50	0.00	0.36	23.3	2420.50	0.00	0.33	24.2
2420.50	0.00	0.30	25.0	2420.60	0.00	0.10	26.0	2420.75	0.00	0.08	26.7
2420.84	0.00	0.01	27.4	2421.04	0.00	0.04	28.0	2421.04	0.00	0.01	28.9
2421.07	0.00	0.01	29.7	2421.09	0.00	0.01	30.6	2421.13	0.00	0.02	31.4
2421.14	0.00	0.00	32.3	2421.17	0.00	0.00	33.1	2421.43	0.00	0.00	34.0

ID

10 SECTION 10.00 TIME = 5.80 HRS WS =2419.83 WIDTH = 14.7

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2420.20	0.00	0.00	5.0	2420.18	0.00	0.00	5.9	2420.15	0.00	0.00	6.8
2420.13	0.00	0.00	7.6	2420.10	0.00	0.00	8.5	2420.08	0.00	0.00	9.4
2420.05	0.00	0.00	10.2	2420.03	0.00	0.00	11.1	2420.00	0.00	0.00	12.0
2419.82	0.00	-0.01	12.7	2419.45	0.00	-0.22	13.2	2419.39	0.00	-0.11	14.0
2419.11	0.00	-0.09	15.0	2419.11	0.00	-0.06	15.8	2419.11	0.00	-0.03	16.7
2419.11	0.00	0.01	17.5	2419.11	0.00	0.04	18.3	2419.11	0.00	0.08	19.2
2419.11	0.00	0.11	20.0	2419.11	0.00	0.08	20.8	2419.11	0.00	0.04	21.7
2419.11	0.00	0.01	22.5	2419.11	0.00	-0.02	23.3	2419.11	0.00	-0.06	24.2
2419.11	0.00	-0.09	25.0	2419.39	0.00	-0.11	26.0	2419.45	0.00	-0.22	26.8
2419.82	0.00	-0.01	27.3	2420.00	0.00	0.00	28.0	2420.03	0.00	0.00	28.9
2420.06	0.00	0.00	29.7	2420.09	0.00	0.00	30.6	2420.11	0.00	0.00	31.4
2420.14	0.00	0.00	32.3	2420.17	0.00	0.00	33.1	2420.20	0.00	0.00	34.0

ID

9 SECTION 9.00 TIME = 5.80 HRS WS =2419.33 WIDTH = 27.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2419.53	0.00	0.00	5.0	2419.19	0.00	0.02	5.9	2419.16	0.00	0.01	6.8
2419.19	0.00	0.07	7.6	2419.15	0.00	0.05	8.5	2419.16	0.00	0.08	9.4
2419.14	0.00	0.09	10.2	2419.10	0.00	0.08	11.1	2419.02	0.00	0.02	12.0
2418.86	0.00	0.02	12.6	2418.74	0.00	0.07	13.3	2418.70	0.00	0.20	14.0
2418.67	0.00	0.47	15.0	2418.67	0.00	0.50	15.8	2418.67	0.00	0.53	16.7
2418.67	0.00	0.57	17.5	2418.67	0.00	0.60	18.3	2418.67	0.00	0.63	19.2
2418.67	0.00	0.67	20.0	2418.67	0.00	0.63	20.8	2418.67	0.00	0.60	21.7
2418.67	0.00	0.57	22.5	2418.67	0.00	0.53	23.3	2418.67	0.00	0.50	24.2
2418.67	0.00	0.47	25.0	2418.70	0.00	0.20	26.0	2418.74	0.00	0.07	26.7
2418.86	0.00	0.02	27.4	2419.02	0.00	0.02	28.0	2419.10	0.00	0.08	28.9
2419.15	0.00	0.09	29.7	2419.14	0.00	0.06	30.6	2419.19	0.00	0.08	31.4
2419.21	0.00	0.06	32.3	2419.25	0.00	0.08	33.1	2419.53	0.00	0.00	34.0

ID

8 SECTION 8.00 TIME = 5.80 HRS WS =2417.83 WIDTH = 16.5

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2418.20	0.00	0.00	5.0	2418.18	0.00	0.00	5.9	2418.15	0.00	0.00	6.8
2418.13	0.00	0.00	7.6	2418.10	0.00	0.00	8.5	2418.08	0.00	0.00	9.4
2418.05	0.00	0.00	10.2	2418.03	0.00	0.00	11.1	2417.78	0.00	-0.22	11.9
2417.56	0.00	-0.27	12.4	2417.46	0.00	-0.21	13.3	2417.36	0.00	-0.14	14.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2417.12	0.00	-0.08	15.0	2417.12	0.00	-0.04	15.8	2417.12	0.00	-0.01	16.7
2417.12	0.00	0.02	17.5	2417.12	0.00	0.06	18.3	2417.12	0.00	0.09	19.2
2417.12	0.00	0.12	20.0	2417.12	0.00	0.09	20.8	2417.12	0.00	0.06	21.7
2417.12	0.00	0.02	22.5	2417.12	0.00	-0.01	23.3	2417.12	0.00	-0.04	24.2
2417.12	0.00	-0.08	25.0	2417.36	0.00	-0.14	26.0	2417.46	0.00	-0.21	26.7
2417.56	0.00	-0.28	27.6	2417.78	0.00	-0.22	28.1	2418.03	0.00	0.00	28.9
2418.06	0.00	0.00	29.7	2418.09	0.00	0.00	30.6	2418.11	0.00	0.00	31.4
2418.14	0.00	0.00	32.3	2418.17	0.00	0.00	33.1	2418.20	0.00	0.00	34.0

ID  
7 SECTION 7.00 TIME = 5.80 HRS WS =2416.93 WIDTH = 15.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2417.20	0.00	0.00	5.0	2417.18	0.00	0.00	5.9	2417.15	0.00	0.00	6.8
2417.13	0.00	0.00	7.6	2417.10	0.00	0.00	8.5	2417.08	0.00	0.00	9.4
2417.05	0.00	0.00	10.2	2417.03	0.00	0.00	11.1	2416.96	0.00	-0.04	12.0
2416.79	0.00	-0.04	12.6	2416.50	0.00	-0.17	13.4	2416.42	0.00	-0.08	14.0
2416.22	0.00	0.02	15.0	2416.22	0.00	0.05	15.8	2416.22	0.00	0.08	16.7
2416.22	0.00	0.12	17.5	2416.22	0.00	0.15	18.3	2416.22	0.00	0.18	19.2
2416.22	0.00	0.22	20.0	2416.22	0.00	0.18	20.8	2416.22	0.00	0.15	21.7
2416.22	0.00	0.12	22.5	2416.22	0.00	0.08	23.3	2416.22	0.00	0.05	24.2
2416.22	0.00	0.02	25.0	2416.42	0.00	-0.08	26.0	2416.50	0.00	-0.17	26.6
2416.79	0.00	-0.04	27.4	2416.96	0.00	-0.04	28.0	2417.03	0.00	0.00	28.9
2417.06	0.00	0.00	29.7	2417.09	0.00	0.00	30.6	2417.11	0.00	0.00	31.4
2417.14	0.00	0.00	32.3	2417.17	0.00	0.00	33.1	2417.20	0.00	0.00	34.0

ID  
6 SECTION 6.00 TIME = 5.80 HRS WS =2415.93 WIDTH = 17.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2416.20	0.00	0.00	5.0	2416.18	0.00	0.00	5.9	2416.15	0.00	0.00	6.8
2416.13	0.00	0.00	7.6	2416.10	0.00	0.00	8.5	2416.08	0.00	0.00	9.4
2416.05	0.00	0.00	10.2	2416.03	0.00	0.00	11.1	2415.78	0.00	-0.22	11.9
2415.58	0.00	-0.25	12.4	2415.44	0.00	-0.22	13.4	2415.49	0.00	-0.01	14.0
2415.25	0.00	0.05	15.0	2415.25	0.00	0.08	15.8	2415.24	0.00	0.11	16.7
2415.24	0.00	0.14	17.5	2415.24	0.00	0.18	18.3	2415.24	0.00	0.21	19.2
2415.24	0.00	0.24	20.0	2415.24	0.00	0.21	20.8	2415.24	0.00	0.18	21.7
2415.24	0.00	0.14	22.5	2415.24	0.00	0.11	23.3	2415.25	0.00	0.08	24.2
2415.25	0.00	0.05	25.0	2415.49	0.00	-0.01	26.0	2415.44	0.00	-0.22	26.6
2415.58	0.00	-0.25	27.6	2415.78	0.00	-0.22	28.1	2416.03	0.00	0.00	28.9
2416.06	0.00	0.00	29.7	2416.09	0.00	0.00	30.6	2416.11	0.00	0.00	31.4
2416.14	0.00	0.00	32.3	2416.17	0.00	0.00	33.1	2416.20	0.00	0.00	34.0

ID  
5 SECTION 5.00 TIME = 5.80 HRS WS =2414.93 WIDTH = 16.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2415.20	0.00	0.00	5.0	2415.18	0.00	0.00	5.9	2415.15	0.00	0.00	6.8
2415.13	0.00	0.00	7.6	2415.10	0.00	0.00	8.5	2415.08	0.00	0.00	9.4
2415.05	0.00	0.00	10.2	2415.03	0.00	0.00	11.1	2414.93	0.00	-0.07	12.0
2414.65	0.00	-0.18	12.5	2414.52	0.00	-0.15	13.3	2414.45	0.00	-0.05	14.0
2414.23	0.00	0.03	15.0	2414.23	0.00	0.06	15.8	2414.23	0.00	0.09	16.7
2414.23	0.00	0.13	17.5	2414.23	0.00	0.16	18.3	2414.23	0.00	0.19	19.2
2414.23	0.00	0.23	20.0	2414.23	0.00	0.19	20.8	2414.23	0.00	0.16	21.7
2414.23	0.00	0.13	22.5	2414.23	0.00	0.09	23.3	2414.23	0.00	0.06	24.2
2414.23	0.00	0.03	25.0	2414.45	0.00	-0.05	26.0	2414.52	0.00	-0.15	26.7
2414.65	0.00	-0.18	27.5	2414.93	0.00	-0.07	28.0	2415.03	0.00	0.00	28.9
2415.06	0.00	0.00	29.7	2415.09	0.00	0.00	30.6	2415.11	0.00	0.00	31.4
2415.14	0.00	0.00	32.3	2415.17	0.00	0.00	33.1	2415.20	0.00	0.00	34.0

## ID

4 SECTION 4.00 TIME = 5.80 HRS WS =2413.93 WIDTH = 17.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2414.20	0.00	0.00	5.0	2414.18	0.00	0.00	5.9	2414.15	0.00	0.00	6.8
2414.13	0.00	0.00	7.6	2414.10	0.00	0.00	8.5	2414.08	0.00	0.00	9.4
2414.05	0.00	0.00	10.2	2414.03	0.00	0.00	11.1	2413.76	0.00	-0.24	11.9
2413.56	0.00	-0.27	12.5	2413.41	0.00	-0.26	13.3	2413.47	0.00	-0.03	14.0
2413.26	0.00	0.06	15.0	2413.26	0.00	0.09	15.8	2413.26	0.00	0.12	16.7
2413.25	0.00	0.15	17.5	2413.25	0.00	0.18	18.3	2413.24	0.00	0.21	19.2
2413.24	0.00	0.24	20.0	2413.24	0.00	0.21	20.8	2413.25	0.00	0.18	21.7
2413.25	0.00	0.15	22.5	2413.26	0.00	0.12	23.3	2413.26	0.00	0.09	24.2
2413.26	0.00	0.06	25.0	2413.47	0.00	-0.03	26.0	2413.41	0.00	-0.26	26.7
2413.56	0.00	-0.27	27.5	2413.76	0.00	-0.24	28.1	2414.03	0.00	0.00	28.9
2414.06	0.00	0.00	29.7	2414.09	0.00	0.00	30.6	2414.11	0.00	0.00	31.4
2414.14	0.00	0.00	32.3	2414.17	0.00	0.00	33.1	2414.20	0.00	0.00	34.0

## ID

3 SECTION 3.00 TIME = 5.80 HRS WS =2412.93 WIDTH = 16.0

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2413.20	0.00	0.00	5.0	2413.18	0.00	0.00	5.9	2413.15	0.00	0.00	6.8
2413.13	0.00	0.00	7.6	2413.10	0.00	0.00	8.5	2413.08	0.00	0.00	9.4
2413.05	0.00	0.00	10.2	2413.03	0.00	0.00	11.1	2412.93	0.00	-0.07	12.0
2412.62	0.00	-0.21	12.5	2412.46	0.00	-0.21	13.3	2412.47	0.00	-0.03	14.0
2412.24	0.00	0.04	15.0	2412.24	0.00	0.07	15.8	2412.24	0.00	0.10	16.7
2412.24	0.00	0.14	17.5	2412.24	0.00	0.17	18.3	2412.24	0.00	0.20	19.2
2412.24	0.00	0.24	20.0	2412.24	0.00	0.20	20.8	2412.24	0.00	0.17	21.7
2412.24	0.00	0.14	22.5	2412.24	0.00	0.10	23.3	2412.24	0.00	0.07	24.2
2412.24	0.00	0.04	25.0	2412.47	0.00	-0.03	26.0	2412.46	0.00	-0.21	26.7
2412.62	0.00	-0.21	27.5	2412.93	0.00	-0.07	28.0	2413.03	0.00	0.00	28.9
2413.06	0.00	0.00	29.7	2413.09	0.00	0.00	30.6	2413.11	0.00	0.00	31.4
2413.14	0.00	0.00	32.3	2413.17	0.00	0.00	33.1	2413.20	0.00	0.00	34.0

## ID

2 SECTION 2.00 TIME = 5.80 HRS WS =2411.93 WIDTH = 15.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2412.23	0.00	0.00	5.0	2412.18	0.00	0.00	5.9	2412.15	0.00	0.00	6.8
2412.13	0.00	0.00	7.6	2412.10	0.00	0.00	8.5	2412.08	0.00	0.00	9.4
2412.05	0.00	0.00	10.2	2412.03	0.00	0.00	11.1	2411.95	0.00	-0.05	12.0
2411.63	0.00	-0.21	12.5	2411.40	0.00	-0.26	13.3	2411.40	0.00	-0.10	14.0
2411.26	0.00	0.06	15.0	2411.26	0.00	0.09	15.8	2411.26	0.00	0.12	16.7
2411.25	0.00	0.15	17.5	2411.25	0.00	0.19	18.3	2411.25	0.00	0.22	19.2
2411.25	0.00	0.25	20.0	2411.25	0.00	0.22	20.8	2411.25	0.00	0.19	21.7
2411.25	0.00	0.15	22.5	2411.26	0.00	0.12	23.3	2411.26	0.00	0.09	24.2
2411.26	0.00	0.06	25.0	2411.40	0.00	-0.10	26.0	2411.40	0.00	-0.26	26.7
2411.63	0.00	-0.21	27.5	2411.95	0.00	-0.05	28.0	2412.03	0.00	0.00	28.9
2412.06	0.00	0.00	29.7	2412.09	0.00	0.00	30.6	2412.11	0.00	0.00	31.4
2412.14	0.00	0.00	32.3	2412.17	0.00	0.00	33.1	2412.23	0.00	0.00	34.0

## ID

1 SECTION 1.00 TIME = 5.80 HRS WS =2410.83 WIDTH = 15.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2411.20	0.00	0.00	5.0	2411.18	0.00	0.00	5.9	2411.15	0.00	0.00	6.8
2411.13	0.00	0.00	7.6	2411.10	0.00	0.00	8.5	2411.08	0.00	0.00	9.4

2411.05	0.00	0.00	10.2	2411.03	0.00	0.00	11.1	2411.00	0.00	0.00	12.0
2410.73	0.00	-0.10	12.7	2410.33	0.00	-0.34	13.2	2410.16	0.00	-0.34	14.0
2410.16	0.00	-0.04	15.0	2410.15	0.00	-0.01	15.8	2410.15	0.00	0.02	16.7
2410.15	0.00	0.05	17.5	2410.15	0.00	0.09	18.3	2410.15	0.00	0.12	19.2
2410.15	0.00	0.15	20.0	2410.15	0.00	0.12	20.8	2410.15	0.00	0.09	21.7
2410.15	0.00	0.05	22.5	2410.15	0.00	0.02	23.3	2410.15	0.00	-0.01	24.2
2410.16	0.00	-0.04	25.0	2410.16	0.00	-0.34	26.0	2410.33	0.00	-0.34	26.8
2410.73	0.00	-0.10	27.3	2411.00	0.00	0.00	28.0	2411.03	0.00	0.00	28.9
2411.06	0.00	0.00	29.7	2411.09	0.00	0.00	30.6	2411.11	0.00	0.00	31.4
2411.14	0.00	0.00	32.3	2411.17	0.00	0.00	33.1	2411.20	0.00	0.00	34.0

1

TIME = 10.80 HRS DT = 60 SECS TIME STEP = 600

SECTION	W.S.ELEV.	WIDTH	DEPTH	Q	V	SLOPE	D50	QS/Q	FR	SED.	YIELD
FT	FT	FT	CFS	FPS	MM	1000 PPM	TONS				

1.000	2410.83	15.2	0.68	40	4.27	0.010091	0.28	14.28	0.96	0.602E+03
2.000	2411.93	15.9	0.68	40	4.22	0.010254	0.28	14.25	0.96	0.603E+03
3.000	2412.93	16.0	0.69	40	4.21	0.010230	0.28	14.20	0.96	0.603E+03
4.000	2413.93	17.2	0.69	40	4.13	0.010501	0.28	14.17	0.97	0.604E+03
5.000	2414.93	16.0	0.70	40	4.21	0.010210	0.28	14.16	0.96	0.606E+03
6.000	2415.93	17.1	0.69	40	4.14	0.010554	0.28	14.30	0.97	0.613E+03
7.000	2416.93	15.8	0.71	40	4.23	0.010232	0.28	14.33	0.96	0.615E+03
8.000	2417.83	16.5	0.71	40	4.20	0.010482	0.28	14.48	0.97	0.623E+03
9.000	2419.33	27.9	0.66	40	3.32	0.009567	0.50	14.62	0.89	0.629E+03
10.000	2419.83	14.7	0.72	40	4.34	0.010205	0.29	14.75	0.97	0.643E+03
11.000	2421.23	27.6	0.73	40	3.34	0.009722	0.51	14.90	0.90	0.649E+03
12.000	2422.03	17.2	0.75	40	4.19	0.011028	0.29	15.02	0.99	0.660E+03
13.000	2422.93	15.4	0.93	40	3.93	0.007731	0.52	15.07	0.85	0.665E+03

ID

12 SECTION 12.00 TIME = 10.80 HRS WS =2422.03 WIDTH = 17.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2422.23	0.00	0.00	5.0	2422.18	0.00	0.00	5.9	2422.15	0.00	0.00	6.8
2422.13	0.00	0.00	7.6	2422.10	0.00	0.00	8.5	2422.08	0.00	0.00	9.4
2422.05	0.00	0.00	10.2	2422.03	0.00	0.00	11.1	2422.01	0.00	0.01	12.0
2421.87	0.00	0.04	12.7	2421.73	0.00	0.06	13.3	2421.58	0.00	0.08	14.0
2421.31	0.00	0.11	15.0	2421.28	0.00	0.12	15.8	2421.28	0.00	0.15	16.7
2421.28	0.00	0.18	17.5	2421.28	0.00	0.21	18.3	2421.28	0.00	0.25	19.2
2421.28	0.00	0.28	20.0	2421.28	0.00	0.25	20.8	2421.28	0.00	0.21	21.7
2421.28	0.00	0.18	22.5	2421.28	0.00	0.15	23.3	2421.28	0.00	0.12	24.2
2421.31	0.00	0.11	25.0	2421.58	0.00	0.08	26.0	2421.73	0.00	0.06	26.7
2421.87	0.00	0.04	27.3	2422.01	0.00	0.01	28.0	2422.07	0.00	0.00	28.7
2422.13	0.00	0.00	29.3	2422.23	0.00	0.00	30.0				

ID

11 SECTION 11.00 TIME = 10.80 HRS WS =2421.23 WIDTH = 27.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2421.43	0.00	0.00	5.0	2421.18	0.00	0.00	5.9	2421.15	0.00	0.00	6.8
2421.13	0.00	0.01	7.6	2421.11	0.00	0.01	8.5	2421.08	0.00	0.01	9.4
2421.06	0.00	0.01	10.2	2421.04	0.00	0.01	11.1	2420.98	0.00	-0.02	12.0
2420.84	0.00	0.01	12.6	2420.75	0.00	0.08	13.3	2420.60	0.00	0.10	14.0
2420.50	0.00	0.30	15.0	2420.50	0.00	0.33	15.8	2420.50	0.00	0.36	16.7
2420.50	0.00	0.40	17.5	2420.50	0.00	0.43	18.3	2420.50	0.00	0.46	19.2
2420.50	0.00	0.50	20.0	2420.50	0.00	0.46	20.8	2420.50	0.00	0.43	21.7
2420.50	0.00	0.40	22.5	2420.50	0.00	0.36	23.3	2420.50	0.00	0.33	24.2
2420.50	0.00	0.30	25.0	2420.60	0.00	0.10	26.0	2420.75	0.00	0.08	26.7
2420.84	0.00	0.01	27.4	2421.04	0.00	0.04	28.0	2421.04	0.00	0.01	28.9

2421.07 0.00 0.01 29.7 2421.09 0.00 0.01 30.6 2421.13 0.00 0.02 31.4  
 2421.14 0.00 0.00 32.3 2421.17 0.00 0.00 33.1 2421.43 0.00 0.00 34.0

ID  
 10 SECTION 10.00 TIME = 10.80 HRS WS =2419.83 WIDTH = 14.7

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2420.20 0.00 0.00 5.0 2420.18 0.00 0.00 5.9 2420.15 0.00 0.00 6.8  
 2420.13 0.00 0.00 7.6 2420.10 0.00 0.00 8.5 2420.08 0.00 0.00 9.4  
 2420.05 0.00 0.00 10.2 2420.03 0.00 0.00 11.1 2420.00 0.00 0.00 12.0  
 2419.82 0.00 -0.01 12.7 2419.45 0.00 -0.22 13.2 2419.39 0.00 -0.11 14.0  
 2419.11 0.00 -0.09 15.0 2419.11 0.00 -0.06 15.8 2419.11 0.00 -0.03 16.7  
 2419.11 0.00 0.01 17.5 2419.11 0.00 0.04 18.3 2419.11 0.00 0.08 19.2  
 2419.11 0.00 0.11 20.0 2419.11 0.00 0.08 20.8 2419.11 0.00 0.04 21.7  
 2419.11 0.00 0.01 22.5 2419.11 0.00 -0.02 23.3 2419.11 0.00 -0.06 24.2  
 2419.11 0.00 -0.09 25.0 2419.39 0.00 -0.11 26.0 2419.45 0.00 -0.22 26.8  
 2419.82 0.00 -0.01 27.3 2420.00 0.00 0.00 28.0 2420.03 0.00 0.00 28.9  
 2420.06 0.00 0.00 29.7 2420.09 0.00 0.00 30.6 2420.11 0.00 0.00 31.4  
 2420.14 0.00 0.00 32.3 2420.17 0.00 0.00 33.1 2420.20 0.00 0.00 34.0

ID  
 9 SECTION 9.00 TIME = 10.80 HRS WS =2419.33 WIDTH = 27.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2419.53 0.00 0.00 5.0 2419.19 0.00 0.02 5.9 2419.16 0.00 0.01 6.8  
 2419.19 0.00 0.07 7.6 2419.15 0.00 0.05 8.5 2419.16 0.00 0.08 9.4  
 2419.14 0.00 0.09 10.2 2419.10 0.00 0.08 11.1 2419.02 0.00 0.02 12.0  
 2418.86 0.00 0.02 12.6 2418.74 0.00 0.07 13.3 2418.70 0.00 0.20 14.0  
 2418.67 0.00 0.47 15.0 2418.67 0.00 0.50 15.8 2418.67 0.00 0.53 16.7  
 2418.67 0.00 0.57 17.5 2418.67 0.00 0.60 18.3 2418.67 0.00 0.63 19.2  
 2418.67 0.00 0.67 20.0 2418.67 0.00 0.63 20.8 2418.67 0.00 0.60 21.7  
 2418.67 0.00 0.57 22.5 2418.67 0.00 0.53 23.3 2418.67 0.00 0.50 24.2  
 2418.67 0.00 0.47 25.0 2418.70 0.00 0.20 26.0 2418.74 0.00 0.07 26.7  
 2418.86 0.00 0.02 27.4 2419.02 0.00 0.02 28.0 2419.10 0.00 0.08 28.9  
 2419.15 0.00 0.09 29.7 2419.14 0.00 0.06 30.6 2419.19 0.00 0.08 31.4  
 2419.21 0.00 0.06 32.3 2419.25 0.00 0.08 33.1 2419.53 0.00 0.00 34.0

ID  
 8 SECTION 8.00 TIME = 10.80 HRS WS =2417.83 WIDTH = 16.5

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2418.20 0.00 0.00 5.0 2418.18 0.00 0.00 5.9 2418.15 0.00 0.00 6.8  
 2418.13 0.00 0.00 7.6 2418.10 0.00 0.00 8.5 2418.08 0.00 0.00 9.4  
 2418.05 0.00 0.00 10.2 2418.03 0.00 0.00 11.1 2417.78 0.00 -0.22 11.9  
 2417.56 0.00 -0.27 12.4 2417.46 0.00 -0.21 13.3 2417.36 0.00 -0.14 14.0  
 2417.12 0.00 -0.08 15.0 2417.12 0.00 -0.04 15.8 2417.12 0.00 -0.01 16.7  
 2417.12 0.00 0.02 17.5 2417.12 0.00 0.06 18.3 2417.12 0.00 0.09 19.2  
 2417.12 0.00 0.12 20.0 2417.12 0.00 0.09 20.8 2417.12 0.00 0.06 21.7  
 2417.12 0.00 0.02 22.5 2417.12 0.00 -0.01 23.3 2417.12 0.00 -0.04 24.2  
 2417.12 0.00 -0.08 25.0 2417.36 0.00 -0.14 26.0 2417.46 0.00 -0.21 26.7  
 2417.56 0.00 -0.28 27.6 2417.78 0.00 -0.22 28.1 2418.03 0.00 0.00 28.9  
 2418.06 0.00 0.00 29.7 2418.09 0.00 0.00 30.6 2418.11 0.00 0.00 31.4  
 2418.14 0.00 0.00 32.3 2418.17 0.00 0.00 33.1 2418.20 0.00 0.00 34.0

ID  
 7 SECTION 7.00 TIME = 10.80 HRS WS =2416.93 WIDTH = 15.8

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2417.20	0.00	0.00	5.0	2417.18	0.00	0.00	5.9	2417.15	0.00	0.00	6.8	
2417.13	0.00	0.00	7.6	2417.10	0.00	0.00	8.5	2417.08	0.00	0.00	9.4	
2417.05	0.00	0.00	10.2	2417.03	0.00	0.00	11.1	2416.96	0.00	-0.04	12.0	
2416.79	0.00	-0.04	12.6	2416.50	0.00	-0.17	13.4	2416.42	0.00	-0.08	14.0	
2416.22	0.00	0.02	15.0	2416.22	0.00	0.05	15.8	2416.22	0.00	0.08	16.7	
2416.22	0.00	0.12	17.5	2416.22	0.00	0.15	18.3	2416.22	0.00	0.18	19.2	
2416.22	0.00	0.22	20.0	2416.22	0.00	0.18	20.8	2416.22	0.00	0.15	21.7	
2416.22	0.00	0.12	22.5	2416.22	0.00	0.08	23.3	2416.22	0.00	0.05	24.2	
2416.22	0.00	0.02	25.0	2416.42	0.00	-0.08	26.0	2416.50	0.00	-0.17	26.6	
2416.79	0.00	-0.04	27.4	2416.96	0.00	-0.04	28.0	2417.03	0.00	0.00	28.9	
2417.06	0.00	0.00	29.7	2417.09	0.00	0.00	30.6	2417.11	0.00	0.00	31.4	
2417.14	0.00	0.00	32.3	2417.17	0.00	0.00	33.1	2417.20	0.00	0.00	34.0	

ID  
6 SECTION 6.00 TIME = 10.80 HRS WS =2415.93 WIDTH = 17.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2416.20	0.00	0.00	5.0	2416.18	0.00	0.00	5.9	2416.15	0.00	0.00	6.8	
2416.13	0.00	0.00	7.6	2416.10	0.00	0.00	8.5	2416.08	0.00	0.00	9.4	
2416.05	0.00	0.00	10.2	2416.03	0.00	0.00	11.1	2415.78	0.00	-0.22	11.9	
2415.58	0.00	-0.25	12.4	2415.44	0.00	-0.22	13.4	2415.49	0.00	-0.01	14.0	
2415.25	0.00	0.05	15.0	2415.25	0.00	0.08	15.8	2415.24	0.00	0.11	16.7	
2415.24	0.00	0.14	17.5	2415.24	0.00	0.18	18.3	2415.24	0.00	0.21	19.2	
2415.24	0.00	0.24	20.0	2415.24	0.00	0.21	20.8	2415.24	0.00	0.18	21.7	
2415.24	0.00	0.14	22.5	2415.24	0.00	0.11	23.3	2415.25	0.00	0.08	24.2	
2415.25	0.00	0.05	25.0	2415.49	0.00	-0.01	26.0	2415.44	0.00	-0.22	26.6	
2415.58	0.00	-0.25	27.6	2415.78	0.00	-0.22	28.1	2416.03	0.00	0.00	28.9	
2416.06	0.00	0.00	29.7	2416.09	0.00	0.00	30.6	2416.11	0.00	0.00	31.4	
2416.14	0.00	0.00	32.3	2416.17	0.00	0.00	33.1	2416.20	0.00	0.00	34.0	

ID  
5 SECTION 5.00 TIME = 10.80 HRS WS =2414.93 WIDTH = 16.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2415.20	0.00	0.00	5.0	2415.18	0.00	0.00	5.9	2415.15	0.00	0.00	6.8	
2415.13	0.00	0.00	7.6	2415.10	0.00	0.00	8.5	2415.08	0.00	0.00	9.4	
2415.05	0.00	0.00	10.2	2415.03	0.00	0.00	11.1	2414.93	0.00	-0.07	12.0	
2414.65	0.00	-0.18	12.5	2414.52	0.00	-0.15	13.3	2414.45	0.00	-0.05	14.0	
2414.23	0.00	0.03	15.0	2414.23	0.00	0.06	15.8	2414.23	0.00	0.09	16.7	
2414.23	0.00	0.13	17.5	2414.23	0.00	0.16	18.3	2414.23	0.00	0.19	19.2	
2414.23	0.00	0.23	20.0	2414.23	0.00	0.19	20.8	2414.23	0.00	0.16	21.7	
2414.23	0.00	0.13	22.5	2414.23	0.00	0.09	23.3	2414.23	0.00	0.06	24.2	
2414.23	0.00	0.03	25.0	2414.45	0.00	-0.05	26.0	2414.52	0.00	-0.15	26.7	
2414.65	0.00	-0.18	27.5	2414.93	0.00	-0.07	28.0	2415.03	0.00	0.00	28.9	
2415.06	0.00	0.00	29.7	2415.09	0.00	0.00	30.6	2415.11	0.00	0.00	31.4	
2415.14	0.00	0.00	32.3	2415.17	0.00	0.00	33.1	2415.20	0.00	0.00	34.0	

ID  
4 SECTION 4.00 TIME = 10.80 HRS WS =2413.93 WIDTH = 17.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2414.20	0.00	0.00	5.0	2414.18	0.00	0.00	5.9	2414.15	0.00	0.00	6.8	
2414.13	0.00	0.00	7.6	2414.10	0.00	0.00	8.5	2414.08	0.00	0.00	9.4	
2414.05	0.00	0.00	10.2	2414.03	0.00	0.00	11.1	2413.76	0.00	-0.24	11.9	
2413.56	0.00	-0.27	12.5	2413.41	0.00	-0.26	13.3	2413.47	0.00	-0.03	14.0	
2413.26	0.00	0.06	15.0	2413.26	0.00	0.09	15.8	2413.26	0.00	0.12	16.7	
2413.25	0.00	0.15	17.5	2413.25	0.00	0.18	18.3	2413.24	0.00	0.21	19.2	
2413.24	0.00	0.24	20.0	2413.24	0.00	0.21	20.8	2413.25	0.00	0.18	21.7	
2413.25	0.00	0.15	22.5	2413.26	0.00	0.12	23.3	2413.26	0.00	0.09	24.2	

2413.26	0.00	0.06	25.0	2413.47	0.00	-0.03	26.0	2413.41	0.00	-0.26	26.7
2413.56	0.00	-0.27	27.5	2413.76	0.00	-0.24	28.1	2414.03	0.00	0.00	28.9
2414.06	0.00	0.00	29.7	2414.09	0.00	0.00	30.6	2414.11	0.00	0.00	31.4
2414.14	0.00	0.00	32.3	2414.17	0.00	0.00	33.1	2414.20	0.00	0.00	34.0

ID  
3 SECTION 3.00 TIME = 10.80 HRS WS =2412.93 WIDTH = 16.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2413.20	0.00	0.00	5.0	2413.18	0.00	0.00	5.9	2413.15	0.00	0.00	6.8
2413.13	0.00	0.00	7.6	2413.10	0.00	0.00	8.5	2413.08	0.00	0.00	9.4
2413.05	0.00	0.00	10.2	2413.03	0.00	0.00	11.1	2412.93	0.00	-0.07	12.0
2412.62	0.00	-0.21	12.5	2412.46	0.00	-0.21	13.3	2412.47	0.00	-0.03	14.0
2412.24	0.00	0.04	15.0	2412.24	0.00	0.07	15.8	2412.24	0.00	0.10	16.7
2412.24	0.00	0.14	17.5	2412.24	0.00	0.17	18.3	2412.24	0.00	0.20	19.2
2412.24	0.00	0.24	20.0	2412.24	0.00	0.20	20.8	2412.24	0.00	0.17	21.7
2412.24	0.00	0.14	22.5	2412.24	0.00	0.10	23.3	2412.24	0.00	0.07	24.2
2412.24	0.00	0.04	25.0	2412.47	0.00	-0.03	26.0	2412.46	0.00	-0.21	26.7
2412.62	0.00	-0.21	27.5	2412.93	0.00	-0.07	28.0	2413.03	0.00	0.00	28.9
2413.06	0.00	0.00	29.7	2413.09	0.00	0.00	30.6	2413.11	0.00	0.00	31.4
2413.14	0.00	0.00	32.3	2413.17	0.00	0.00	33.1	2413.20	0.00	0.00	34.0

ID  
2 SECTION 2.00 TIME = 10.80 HRS WS =2411.93 WIDTH = 15.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2412.23	0.00	0.00	5.0	2412.18	0.00	0.00	5.9	2412.15	0.00	0.00	6.8
2412.13	0.00	0.00	7.6	2412.10	0.00	0.00	8.5	2412.08	0.00	0.00	9.4
2412.05	0.00	0.00	10.2	2412.03	0.00	0.00	11.1	2411.95	0.00	-0.05	12.0
2411.63	0.00	-0.21	12.5	2411.40	0.00	-0.26	13.3	2411.40	0.00	-0.10	14.0
2411.26	0.00	0.06	15.0	2411.26	0.00	0.09	15.8	2411.26	0.00	0.12	16.7
2411.25	0.00	0.15	17.5	2411.25	0.00	0.19	18.3	2411.25	0.00	0.22	19.2
2411.25	0.00	0.25	20.0	2411.25	0.00	0.22	20.8	2411.25	0.00	0.19	21.7
2411.25	0.00	0.15	22.5	2411.26	0.00	0.12	23.3	2411.26	0.00	0.09	24.2
2411.26	0.00	0.06	25.0	2411.40	0.00	-0.10	26.0	2411.40	0.00	-0.26	26.7
2411.63	0.00	-0.21	27.5	2411.95	0.00	-0.05	28.0	2412.03	0.00	0.00	28.9
2412.06	0.00	0.00	29.7	2412.09	0.00	0.00	30.6	2412.11	0.00	0.00	31.4
2412.14	0.00	0.00	32.3	2412.17	0.00	0.00	33.1	2412.23	0.00	0.00	34.0

ID  
1 SECTION 1.00 TIME = 10.80 HRS WS =2410.83 WIDTH = 15.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2411.20	0.00	0.00	5.0	2411.18	0.00	0.00	5.9	2411.15	0.00	0.00	6.8
2411.13	0.00	0.00	7.6	2411.10	0.00	0.00	8.5	2411.08	0.00	0.00	9.4
2411.05	0.00	0.00	10.2	2411.03	0.00	0.00	11.1	2411.00	0.00	0.00	12.0
2410.73	0.00	-0.10	12.7	2410.33	0.00	-0.34	13.2	2410.16	0.00	-0.34	14.0
2410.16	0.00	-0.04	15.0	2410.15	0.00	-0.01	15.8	2410.15	0.00	0.02	16.7
2410.15	0.00	0.05	17.5	2410.15	0.00	0.09	18.3	2410.15	0.00	0.12	19.2
2410.15	0.00	0.15	20.0	2410.15	0.00	0.12	20.8	2410.15	0.00	0.09	21.7
2410.15	0.00	0.05	22.5	2410.15	0.00	0.02	23.3	2410.15	0.00	-0.01	24.2
2410.16	0.00	-0.04	25.0	2410.16	0.00	-0.34	26.0	2410.33	0.00	-0.34	26.8
2410.73	0.00	-0.10	27.3	2411.00	0.00	0.00	28.0	2411.03	0.00	0.00	28.9
2411.06	0.00	0.00	29.7	2411.09	0.00	0.00	30.6	2411.11	0.00	0.00	31.4
2411.14	0.00	0.00	32.3	2411.17	0.00	0.00	33.1	2411.20	0.00	0.00	34.0

1  
TIME = 15.80 HRS DT = 60 SECS TIME STEP = 900

SECTION W.S.ELEV. WIDTH DEPTH Q V SLOPE D50 QS/Q FR SED. YIELD

FT	FT	FT	CFS	FPS	MM	1000 PPM	TONS
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1.000	2410.83	15.2	0.68	40	4.27	0.010091	0.28	14.28	0.96	0.923E+03
2.000	2411.93	15.9	0.68	40	4.22	0.010254	0.28	14.25	0.96	0.923E+03
3.000	2412.93	16.0	0.69	40	4.21	0.010230	0.28	14.20	0.96	0.922E+03
4.000	2413.93	17.2	0.69	40	4.13	0.010501	0.28	14.17	0.97	0.922E+03
5.000	2414.93	16.0	0.70	40	4.21	0.010210	0.28	14.16	0.96	0.924E+03
6.000	2415.93	17.1	0.69	40	4.14	0.010554	0.28	14.30	0.97	0.934E+03
7.000	2416.93	15.8	0.71	40	4.23	0.010232	0.28	14.33	0.96	0.937E+03
8.000	2417.83	16.5	0.71	40	4.20	0.010482	0.28	14.48	0.97	0.948E+03
9.000	2419.33	27.9	0.66	40	3.32	0.009567	0.50	14.62	0.89	0.957E+03
10.000	2419.83	14.7	0.72	40	4.34	0.010205	0.29	14.75	0.97	0.974E+03
11.000	2421.23	27.6	0.73	40	3.34	0.009722	0.51	14.90	0.90	0.984E+03
12.000	2422.03	17.2	0.75	40	4.19	0.011028	0.29	15.02	0.99	0.997E+03
13.000	2422.93	15.4	0.93	40	3.93	0.007731	0.52	15.07	0.85	0.100E+04

ID

12 SECTION 12.00 TIME = 15.80 HRS WS =2422.03 WIDTH = 17.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2422.23	0.00	0.00	5.0	2422.18	0.00	0.00	5.9	2422.15	0.00	0.00	6.8
2422.13	0.00	0.00	7.6	2422.10	0.00	0.00	8.5	2422.08	0.00	0.00	9.4
2422.05	0.00	0.00	10.2	2422.03	0.00	0.00	11.1	2422.01	0.00	0.01	12.0
2421.87	0.00	0.04	12.7	2421.73	0.00	0.06	13.3	2421.58	0.00	0.08	14.0
2421.31	0.00	0.11	15.0	2421.28	0.00	0.12	15.8	2421.28	0.00	0.15	16.7
2421.28	0.00	0.18	17.5	2421.28	0.00	0.21	18.3	2421.28	0.00	0.25	19.2
2421.28	0.00	0.28	20.0	2421.28	0.00	0.25	20.8	2421.28	0.00	0.21	21.7
2421.28	0.00	0.18	22.5	2421.28	0.00	0.15	23.3	2421.28	0.00	0.12	24.2
2421.31	0.00	0.11	25.0	2421.58	0.00	0.08	26.0	2421.73	0.00	0.06	26.7
2421.87	0.00	0.04	27.3	2422.01	0.00	0.01	28.0	2422.07	0.00	0.00	28.7
2422.13	0.00	0.00	29.3	2422.23	0.00	0.00	30.0				

ID

11 SECTION 11.00 TIME = 15.80 HRS WS =2421.23 WIDTH = 27.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2421.43	0.00	0.00	5.0	2421.18	0.00	0.00	5.9	2421.15	0.00	0.00	6.8
2421.13	0.00	0.01	7.6	2421.11	0.00	0.01	8.5	2421.08	0.00	0.01	9.4
2421.06	0.00	0.01	10.2	2421.04	0.00	0.01	11.1	2420.98	0.00	-0.02	12.0
2420.84	0.00	0.01	12.6	2420.75	0.00	0.08	13.3	2420.60	0.00	0.10	14.0
2420.50	0.00	0.30	15.0	2420.50	0.00	0.33	15.8	2420.50	0.00	0.36	16.7
2420.50	0.00	0.40	17.5	2420.50	0.00	0.43	18.3	2420.50	0.00	0.46	19.2
2420.50	0.00	0.50	20.0	2420.50	0.00	0.46	20.8	2420.50	0.00	0.43	21.7
2420.50	0.00	0.40	22.5	2420.50	0.00	0.36	23.3	2420.50	0.00	0.33	24.2
2420.50	0.00	0.30	25.0	2420.60	0.00	0.10	26.0	2420.75	0.00	0.08	26.7
2420.84	0.00	0.01	27.4	2421.04	0.00	0.04	28.0	2421.04	0.00	0.01	28.9
2421.07	0.00	0.01	29.7	2421.09	0.00	0.01	30.6	2421.13	0.00	0.02	31.4
2421.14	0.00	0.00	32.3	2421.17	0.00	0.00	33.1	2421.43	0.00	0.00	34.0

ID

10 SECTION 10.00 TIME = 15.80 HRS WS =2419.83 WIDTH = 14.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2420.20	0.00	0.00	5.0	2420.18	0.00	0.00	5.9	2420.15	0.00	0.00	6.8
2420.13	0.00	0.00	7.6	2420.10	0.00	0.00	8.5	2420.08	0.00	0.00	9.4
2420.05	0.00	0.00	10.2	2420.03	0.00	0.00	11.1	2420.00	0.00	0.00	12.0
2419.82	0.00	-0.01	12.7	2419.45	0.00	-0.22	13.2	2419.39	0.00	-0.11	14.0
2419.11	0.00	-0.09	15.0	2419.11	0.00	-0.06	15.8	2419.11	0.00	-0.03	16.7
2419.11	0.00	0.01	17.5	2419.11	0.00	0.04	18.3	2419.11	0.00	0.08	19.2

2419.11	0.00	0.11	20.0	2419.11	0.00	0.08	20.8	2419.11	0.00	0.04	21.7
2419.11	0.00	0.01	22.5	2419.11	0.00	-0.02	23.3	2419.11	0.00	-0.06	24.2
2419.11	0.00	-0.09	25.0	2419.39	0.00	-0.11	26.0	2419.45	0.00	-0.22	26.8
2419.82	0.00	-0.01	27.3	2420.00	0.00	0.00	28.0	2420.03	0.00	0.00	28.9
2420.06	0.00	0.00	29.7	2420.09	0.00	0.00	30.6	2420.11	0.00	0.00	31.4
2420.14	0.00	0.00	32.3	2420.17	0.00	0.00	33.1	2420.20	0.00	0.00	34.0

ID  
9 SECTION 9.00 TIME = 15.80 HRS WS =2419.33 WIDTH = 27.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2419.53	0.00	0.00	5.0	2419.19	0.00	0.02	5.9	2419.16	0.00	0.01	6.8
2419.19	0.00	0.07	7.6	2419.15	0.00	0.05	8.5	2419.16	0.00	0.08	9.4
2419.14	0.00	0.09	10.2	2419.10	0.00	0.08	11.1	2419.02	0.00	0.02	12.0
2418.86	0.00	0.02	12.6	2418.74	0.00	0.07	13.3	2418.70	0.00	0.20	14.0
2418.67	0.00	0.47	15.0	2418.67	0.00	0.50	15.8	2418.67	0.00	0.53	16.7
2418.67	0.00	0.57	17.5	2418.67	0.00	0.60	18.3	2418.67	0.00	0.63	19.2
2418.67	0.00	0.67	20.0	2418.67	0.00	0.63	20.8	2418.67	0.00	0.60	21.7
2418.67	0.00	0.57	22.5	2418.67	0.00	0.53	23.3	2418.67	0.00	0.50	24.2
2418.67	0.00	0.47	25.0	2418.70	0.00	0.20	26.0	2418.74	0.00	0.07	26.7
2418.86	0.00	0.02	27.4	2419.02	0.00	0.02	28.0	2419.10	0.00	0.08	28.9
2419.15	0.00	0.09	29.7	2419.14	0.00	0.06	30.6	2419.19	0.00	0.08	31.4
2419.21	0.00	0.06	32.3	2419.25	0.00	0.08	33.1	2419.53	0.00	0.00	34.0

ID  
8 SECTION 8.00 TIME = 15.80 HRS WS =2417.83 WIDTH = 16.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2418.20	0.00	0.00	5.0	2418.18	0.00	0.00	5.9	2418.15	0.00	0.00	6.8
2418.13	0.00	0.00	7.6	2418.10	0.00	0.00	8.5	2418.08	0.00	0.00	9.4
2418.05	0.00	0.00	10.2	2418.03	0.00	0.00	11.1	2417.78	0.00	-0.22	11.9
2417.56	0.00	-0.27	12.4	2417.46	0.00	-0.21	13.3	2417.36	0.00	-0.14	14.0
2417.12	0.00	-0.08	15.0	2417.12	0.00	-0.04	15.8	2417.12	0.00	-0.01	16.7
2417.12	0.00	0.02	17.5	2417.12	0.00	0.06	18.3	2417.12	0.00	0.09	19.2
2417.12	0.00	0.12	20.0	2417.12	0.00	0.09	20.8	2417.12	0.00	0.06	21.7
2417.12	0.00	0.02	22.5	2417.12	0.00	-0.01	23.3	2417.12	0.00	-0.04	24.2
2417.12	0.00	-0.08	25.0	2417.36	0.00	-0.14	26.0	2417.46	0.00	-0.21	26.7
2417.56	0.00	-0.28	27.6	2417.78	0.00	-0.22	28.1	2418.03	0.00	0.00	28.9
2418.06	0.00	0.00	29.7	2418.09	0.00	0.00	30.6	2418.11	0.00	0.00	31.4
2418.14	0.00	0.00	32.3	2418.17	0.00	0.00	33.1	2418.20	0.00	0.00	34.0

ID  
7 SECTION 7.00 TIME = 15.80 HRS WS =2416.93 WIDTH = 15.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2417.20	0.00	0.00	5.0	2417.18	0.00	0.00	5.9	2417.15	0.00	0.00	6.8
2417.13	0.00	0.00	7.6	2417.10	0.00	0.00	8.5	2417.08	0.00	0.00	9.4
2417.05	0.00	0.00	10.2	2417.03	0.00	0.00	11.1	2416.96	0.00	-0.04	12.0
2416.79	0.00	-0.04	12.6	2416.50	0.00	-0.17	13.4	2416.42	0.00	-0.08	14.0
2416.22	0.00	0.02	15.0	2416.22	0.00	0.05	15.8	2416.22	0.00	0.08	16.7
2416.22	0.00	0.12	17.5	2416.22	0.00	0.15	18.3	2416.22	0.00	0.18	19.2
2416.22	0.00	0.22	20.0	2416.22	0.00	0.18	20.8	2416.22	0.00	0.15	21.7
2416.22	0.00	0.12	22.5	2416.22	0.00	0.08	23.3	2416.22	0.00	0.05	24.2
2416.22	0.00	0.02	25.0	2416.42	0.00	-0.08	26.0	2416.50	0.00	-0.17	26.6
2416.79	0.00	-0.04	27.4	2416.96	0.00	-0.04	28.0	2417.03	0.00	0.00	28.9
2417.06	0.00	0.00	29.7	2417.09	0.00	0.00	30.6	2417.11	0.00	0.00	31.4
2417.14	0.00	0.00	32.3	2417.17	0.00	0.00	33.1	2417.20	0.00	0.00	34.0

ID

6 SECTION 6.00 TIME = 15.80 HRS WS =2415.93 WIDTH = 17.1

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2416.20	0.00	0.00	5.0	2416.18	0.00	0.00	5.9	2416.15	0.00	0.00	6.8
2416.13	0.00	0.00	7.6	2416.10	0.00	0.00	8.5	2416.08	0.00	0.00	9.4
2416.05	0.00	0.00	10.2	2416.03	0.00	0.00	11.1	2415.78	0.00	-0.22	11.9
2415.58	0.00	-0.25	12.4	2415.44	0.00	-0.22	13.4	2415.49	0.00	-0.01	14.0
2415.25	0.00	0.05	15.0	2415.25	0.00	0.08	15.8	2415.24	0.00	0.11	16.7
2415.24	0.00	0.14	17.5	2415.24	0.00	0.18	18.3	2415.24	0.00	0.21	19.2
2415.24	0.00	0.24	20.0	2415.24	0.00	0.21	20.8	2415.24	0.00	0.18	21.7
2415.24	0.00	0.14	22.5	2415.24	0.00	0.11	23.3	2415.25	0.00	0.08	24.2
2415.25	0.00	0.05	25.0	2415.49	0.00	-0.01	26.0	2415.44	0.00	-0.22	26.6
2415.58	0.00	-0.25	27.6	2415.78	0.00	-0.22	28.1	2416.03	0.00	0.00	28.9
2416.06	0.00	0.00	29.7	2416.09	0.00	0.00	30.6	2416.11	0.00	0.00	31.4
2416.14	0.00	0.00	32.3	2416.17	0.00	0.00	33.1	2416.20	0.00	0.00	34.0

ID

5 SECTION 5.00 TIME = 15.80 HRS WS =2414.93 WIDTH = 16.0

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2415.20	0.00	0.00	5.0	2415.18	0.00	0.00	5.9	2415.15	0.00	0.00	6.8
2415.13	0.00	0.00	7.6	2415.10	0.00	0.00	8.5	2415.08	0.00	0.00	9.4
2415.05	0.00	0.00	10.2	2415.03	0.00	0.00	11.1	2414.93	0.00	-0.07	12.0
2414.65	0.00	-0.18	12.5	2414.52	0.00	-0.15	13.3	2414.45	0.00	-0.05	14.0
2414.23	0.00	0.03	15.0	2414.23	0.00	0.06	15.8	2414.23	0.00	0.09	16.7
2414.23	0.00	0.13	17.5	2414.23	0.00	0.16	18.3	2414.23	0.00	0.19	19.2
2414.23	0.00	0.23	20.0	2414.23	0.00	0.19	20.8	2414.23	0.00	0.16	21.7
2414.23	0.00	0.13	22.5	2414.23	0.00	0.09	23.3	2414.23	0.00	0.06	24.2
2414.23	0.00	0.03	25.0	2414.45	0.00	-0.05	26.0	2414.52	0.00	-0.15	26.7
2414.65	0.00	-0.18	27.5	2414.93	0.00	-0.07	28.0	2415.03	0.00	0.00	28.9
2415.06	0.00	0.00	29.7	2415.09	0.00	0.00	30.6	2415.11	0.00	0.00	31.4
2415.14	0.00	0.00	32.3	2415.17	0.00	0.00	33.1	2415.20	0.00	0.00	34.0

ID

4 SECTION 4.00 TIME = 15.80 HRS WS =2413.93 WIDTH = 17.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2414.20	0.00	0.00	5.0	2414.18	0.00	0.00	5.9	2414.15	0.00	0.00	6.8
2414.13	0.00	0.00	7.6	2414.10	0.00	0.00	8.5	2414.08	0.00	0.00	9.4
2414.05	0.00	0.00	10.2	2414.03	0.00	0.00	11.1	2413.76	0.00	-0.24	11.9
2413.56	0.00	-0.27	12.5	2413.41	0.00	-0.26	13.3	2413.47	0.00	-0.03	14.0
2413.26	0.00	0.06	15.0	2413.26	0.00	0.09	15.8	2413.26	0.00	0.12	16.7
2413.25	0.00	0.15	17.5	2413.25	0.00	0.18	18.3	2413.24	0.00	0.21	19.2
2413.24	0.00	0.24	20.0	2413.24	0.00	0.21	20.8	2413.25	0.00	0.18	21.7
2413.25	0.00	0.15	22.5	2413.26	0.00	0.12	23.3	2413.26	0.00	0.09	24.2
2413.26	0.00	0.06	25.0	2413.47	0.00	-0.03	26.0	2413.41	0.00	-0.26	26.7
2413.56	0.00	-0.27	27.5	2413.76	0.00	-0.24	28.1	2414.03	0.00	0.00	28.9
2414.06	0.00	0.00	29.7	2414.09	0.00	0.00	30.6	2414.11	0.00	0.00	31.4
2414.14	0.00	0.00	32.3	2414.17	0.00	0.00	33.1	2414.20	0.00	0.00	34.0

ID

3 SECTION 3.00 TIME = 15.80 HRS WS =2412.93 WIDTH = 16.0

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2413.20	0.00	0.00	5.0	2413.18	0.00	0.00	5.9	2413.15	0.00	0.00	6.8
2413.13	0.00	0.00	7.6	2413.10	0.00	0.00	8.5	2413.08	0.00	0.00	9.4
2413.05	0.00	0.00	10.2	2413.03	0.00	0.00	11.1	2412.93	0.00	-0.07	12.0
2412.62	0.00	-0.21	12.5	2412.46	0.00	-0.21	13.3	2412.47	0.00	-0.03	14.0

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2412.24	0.00	0.04	15.0	2412.24	0.00	0.07	15.8	2412.24	0.00	0.10	16.7	
2412.24	0.00	0.14	17.5	2412.24	0.00	0.17	18.3	2412.24	0.00	0.20	19.2	
2412.24	0.00	0.24	20.0	2412.24	0.00	0.20	20.8	2412.24	0.00	0.17	21.7	
2412.24	0.00	0.14	22.5	2412.24	0.00	0.10	23.3	2412.24	0.00	0.07	24.2	
2412.24	0.00	0.04	25.0	2412.47	0.00	-0.03	26.0	2412.46	0.00	-0.21	26.7	
2412.62	0.00	-0.21	27.5	2412.93	0.00	-0.07	28.0	2413.03	0.00	0.00	28.9	
2413.06	0.00	0.00	29.7	2413.09	0.00	0.00	30.6	2413.11	0.00	0.00	31.4	
2413.14	0.00	0.00	32.3	2413.17	0.00	0.00	33.1	2413.20	0.00	0.00	34.0	

ID  
2 SECTION 2.00 TIME = 15.80 HRS WS =2411.93 WIDTH = 15.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2412.23	0.00	0.00	5.0	2412.18	0.00	0.00	5.9	2412.15	0.00	0.00	6.8	
2412.13	0.00	0.00	7.6	2412.10	0.00	0.00	8.5	2412.08	0.00	0.00	9.4	
2412.05	0.00	0.00	10.2	2412.03	0.00	0.00	11.1	2411.95	0.00	-0.05	12.0	
2411.63	0.00	-0.21	12.5	2411.40	0.00	-0.26	13.3	2411.40	0.00	-0.10	14.0	
2411.26	0.00	0.06	15.0	2411.26	0.00	0.09	15.8	2411.26	0.00	0.12	16.7	
2411.25	0.00	0.15	17.5	2411.25	0.00	0.19	18.3	2411.25	0.00	0.22	19.2	
2411.25	0.00	0.25	20.0	2411.25	0.00	0.22	20.8	2411.25	0.00	0.19	21.7	
2411.25	0.00	0.15	22.5	2411.26	0.00	0.12	23.3	2411.26	0.00	0.09	24.2	
2411.26	0.00	0.06	25.0	2411.40	0.00	-0.10	26.0	2411.40	0.00	-0.26	26.7	
2411.63	0.00	-0.21	27.5	2411.95	0.00	-0.05	28.0	2412.03	0.00	0.00	28.9	
2412.06	0.00	0.00	29.7	2412.09	0.00	0.00	30.6	2412.11	0.00	0.00	31.4	
2412.14	0.00	0.00	32.3	2412.17	0.00	0.00	33.1	2412.23	0.00	0.00	34.0	

ID  
1 SECTION 1.00 TIME = 15.80 HRS WS =2410.83 WIDTH = 15.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2411.20	0.00	0.00	5.0	2411.18	0.00	0.00	5.9	2411.15	0.00	0.00	6.8	
2411.13	0.00	0.00	7.6	2411.10	0.00	0.00	8.5	2411.08	0.00	0.00	9.4	
2411.05	0.00	0.00	10.2	2411.03	0.00	0.00	11.1	2411.00	0.00	0.00	12.0	
2410.73	0.00	-0.10	12.7	2410.33	0.00	-0.34	13.2	2410.16	0.00	-0.34	14.0	
2410.16	0.00	-0.04	15.0	2410.15	0.00	-0.01	15.8	2410.15	0.00	0.02	16.7	
2410.15	0.00	0.05	17.5	2410.15	0.00	0.09	18.3	2410.15	0.00	0.12	19.2	
2410.15	0.00	0.15	20.0	2410.15	0.00	0.12	20.8	2410.15	0.00	0.09	21.7	
2410.15	0.00	0.05	22.5	2410.15	0.00	0.02	23.3	2410.15	0.00	-0.01	24.2	
2410.16	0.00	-0.04	25.0	2410.16	0.00	-0.34	26.0	2410.33	0.00	-0.34	26.8	
2410.73	0.00	-0.10	27.3	2411.00	0.00	0.00	28.0	2411.03	0.00	0.00	28.9	
2411.06	0.00	0.00	29.7	2411.09	0.00	0.00	30.6	2411.11	0.00	0.00	31.4	
2411.14	0.00	0.00	32.3	2411.17	0.00	0.00	33.1	2411.20	0.00	0.00	34.0	

1  
TIME = 16.51 HRS DT = 60 SECS TIME STEP = 943

SECTION	W.S.ELEV.	WIDTH	DEPTH	Q	V	SLOPE	D50	QS/Q	FR	SED.	YIELD
	FT	FT	FT	CFS	FPS	MM	1000 PPM		TONS		

1.000	2410.83	15.2	0.68	40	4.27 0.010091	0.28	14.28	0.96	0.969E+03		
2.000	2411.93	15.9	0.68	40	4.22 0.010254	0.28	14.25	0.96	0.969E+03		
3.000	2412.93	16.0	0.69	40	4.21 0.010230	0.28	14.20	0.96	0.968E+03		
4.000	2413.93	17.2	0.69	40	4.13 0.010501	0.28	14.17	0.97	0.968E+03		
5.000	2414.93	16.0	0.70	40	4.21 0.010210	0.28	14.16	0.96	0.969E+03		
6.000	2415.93	17.1	0.69	40	4.14 0.010554	0.28	14.30	0.97	0.980E+03		
7.000	2416.93	15.8	0.71	40	4.23 0.010232	0.28	14.33	0.96	0.983E+03		
8.000	2417.83	16.5	0.71	40	4.20 0.010482	0.28	14.48	0.97	0.995E+03		
9.000	2419.33	27.9	0.66	40	3.32 0.009567	0.50	14.62	0.89	0.100E+04		
10.000	2419.83	14.7	0.72	40	4.34 0.010205	0.29	14.75	0.97	0.102E+04		
11.000	2421.23	27.6	0.73	40	3.34 0.009722	0.51	14.90	0.90	0.103E+04		
12.000	2422.03	17.2	0.75	40	4.19 0.011028	0.29	15.02	0.99	0.105E+04		

13.000 2422.93 15.4 0.93 40 3.93 0.007731 0.52 15.07 0.85 0.105E+04

ID  
 12 SECTION 12.00 TIME = 16.51 HRS WS =2422.03 WIDTH = 17.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2422.23	0.00	0.00	5.0	2422.18	0.00	0.00	5.9	2422.15	0.00	0.00	6.8
2422.13	0.00	0.00	7.6	2422.10	0.00	0.00	8.5	2422.08	0.00	0.00	9.4
2422.05	0.00	0.00	10.2	2422.03	0.00	0.00	11.1	2422.01	0.00	0.01	12.0
2421.87	0.00	0.04	12.7	2421.73	0.00	0.06	13.3	2421.58	0.00	0.08	14.0
2421.31	0.00	0.11	15.0	2421.28	0.00	0.12	15.8	2421.28	0.00	0.15	16.7
2421.28	0.00	0.18	17.5	2421.28	0.00	0.21	18.3	2421.28	0.00	0.25	19.2
2421.28	0.00	0.28	20.0	2421.28	0.00	0.25	20.8	2421.28	0.00	0.21	21.7
2421.28	0.00	0.18	22.5	2421.28	0.00	0.15	23.3	2421.28	0.00	0.12	24.2
2421.31	0.00	0.11	25.0	2421.58	0.00	0.08	26.0	2421.73	0.00	0.06	26.7
2421.87	0.00	0.04	27.3	2422.01	0.00	0.01	28.0	2422.07	0.00	0.00	28.7
2422.13	0.00	0.00	29.3	2422.23	0.00	0.00	30.0				

ID  
 11 SECTION 11.00 TIME = 16.51 HRS WS =2421.23 WIDTH = 27.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2421.43	0.00	0.00	5.0	2421.18	0.00	0.00	5.9	2421.15	0.00	0.00	6.8
2421.13	0.00	0.01	7.6	2421.11	0.00	0.01	8.5	2421.08	0.00	0.01	9.4
2421.06	0.00	0.01	10.2	2421.04	0.00	0.01	11.1	2420.98	0.00	-0.02	12.0
2420.84	0.00	0.01	12.6	2420.75	0.00	0.08	13.3	2420.60	0.00	0.10	14.0
2420.50	0.00	0.30	15.0	2420.50	0.00	0.33	15.8	2420.50	0.00	0.36	16.7
2420.50	0.00	0.40	17.5	2420.50	0.00	0.43	18.3	2420.50	0.00	0.46	19.2
2420.50	0.00	0.50	20.0	2420.50	0.00	0.46	20.8	2420.50	0.00	0.43	21.7
2420.50	0.00	0.40	22.5	2420.50	0.00	0.36	23.3	2420.50	0.00	0.33	24.2
2420.50	0.00	0.30	25.0	2420.60	0.00	0.10	26.0	2420.75	0.00	0.08	26.7
2420.84	0.00	0.01	27.4	2421.04	0.00	0.04	28.0	2421.04	0.00	0.01	28.9
2421.07	0.00	0.01	29.7	2421.09	0.00	0.01	30.6	2421.13	0.00	0.02	31.4
2421.14	0.00	0.00	32.3	2421.17	0.00	0.00	33.1	2421.43	0.00	0.00	34.0

ID  
 10 SECTION 10.00 TIME = 16.51 HRS WS =2419.83 WIDTH = 14.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2420.20	0.00	0.00	5.0	2420.18	0.00	0.00	5.9	2420.15	0.00	0.00	6.8
2420.13	0.00	0.00	7.6	2420.10	0.00	0.00	8.5	2420.08	0.00	0.00	9.4
2420.05	0.00	0.00	10.2	2420.03	0.00	0.00	11.1	2420.00	0.00	0.00	12.0
2419.82	0.00	-0.01	12.7	2419.45	0.00	-0.22	13.2	2419.39	0.00	-0.11	14.0
2419.11	0.00	-0.09	15.0	2419.11	0.00	-0.06	15.8	2419.11	0.00	-0.03	16.7
2419.11	0.00	0.01	17.5	2419.11	0.00	0.04	18.3	2419.11	0.00	0.08	19.2
2419.11	0.00	0.11	20.0	2419.11	0.00	0.08	20.8	2419.11	0.00	0.04	21.7
2419.11	0.00	0.01	22.5	2419.11	0.00	-0.02	23.3	2419.11	0.00	-0.06	24.2
2419.11	0.00	-0.09	25.0	2419.39	0.00	-0.11	26.0	2419.45	0.00	-0.22	26.8
2419.82	0.00	-0.01	27.3	2420.00	0.00	0.00	28.0	2420.03	0.00	0.00	28.9
2420.06	0.00	0.00	29.7	2420.09	0.00	0.00	30.6	2420.11	0.00	0.00	31.4
2420.14	0.00	0.00	32.3	2420.17	0.00	0.00	33.1	2420.20	0.00	0.00	34.0

ID  
 9 SECTION 9.00 TIME = 16.51 HRS WS =2419.33 WIDTH = 27.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2419.53	0.00	0.00	5.0	2419.19	0.00	0.02	5.9	2419.16	0.00	0.01	6.8
2419.19	0.00	0.07	7.6	2419.15	0.00	0.05	8.5	2419.16	0.00	0.08	9.4

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2419.14	0.00	0.09	10.2	2419.10	0.00	0.08	11.1	2419.02	0.00	0.02	12.0	
2418.86	0.00	0.02	12.6	2418.74	0.00	0.07	13.3	2418.70	0.00	0.20	14.0	
2418.67	0.00	0.47	15.0	2418.67	0.00	0.50	15.8	2418.67	0.00	0.53	16.7	
2418.67	0.00	0.57	17.5	2418.67	0.00	0.60	18.3	2418.67	0.00	0.63	19.2	
2418.67	0.00	0.67	20.0	2418.67	0.00	0.63	20.8	2418.67	0.00	0.60	21.7	
2418.67	0.00	0.57	22.5	2418.67	0.00	0.53	23.3	2418.67	0.00	0.50	24.2	
2418.67	0.00	0.47	25.0	2418.70	0.00	0.20	26.0	2418.74	0.00	0.07	26.7	
2418.86	0.00	0.02	27.4	2419.02	0.00	0.02	28.0	2419.10	0.00	0.08	28.9	
2419.15	0.00	0.09	29.7	2419.14	0.00	0.06	30.6	2419.19	0.00	0.08	31.4	
2419.21	0.00	0.06	32.3	2419.25	0.00	0.08	33.1	2419.53	0.00	0.00	34.0	

ID  
8 SECTION 8.00 TIME = 16.51 HRS WS =2417.83 WIDTH = 16.5

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2418.20	0.00	0.00	5.0	2418.18	0.00	0.00	5.9	2418.15	0.00	0.00	6.8	
2418.13	0.00	0.00	7.6	2418.10	0.00	0.00	8.5	2418.08	0.00	0.00	9.4	
2418.05	0.00	0.00	10.2	2418.03	0.00	0.00	11.1	2417.78	0.00	-0.22	11.9	
2417.56	0.00	-0.27	12.4	2417.46	0.00	-0.21	13.3	2417.36	0.00	-0.14	14.0	
2417.12	0.00	-0.08	15.0	2417.12	0.00	-0.04	15.8	2417.12	0.00	-0.01	16.7	
2417.12	0.00	0.02	17.5	2417.12	0.00	0.06	18.3	2417.12	0.00	0.09	19.2	
2417.12	0.00	0.12	20.0	2417.12	0.00	0.09	20.8	2417.12	0.00	0.06	21.7	
2417.12	0.00	0.02	22.5	2417.12	0.00	-0.01	23.3	2417.12	0.00	-0.04	24.2	
2417.12	0.00	-0.08	25.0	2417.36	0.00	-0.14	26.0	2417.46	0.00	-0.21	26.7	
2417.56	0.00	-0.28	27.6	2417.78	0.00	-0.22	28.1	2418.03	0.00	0.00	28.9	
2418.06	0.00	0.00	29.7	2418.09	0.00	0.00	30.6	2418.11	0.00	0.00	31.4	
2418.14	0.00	0.00	32.3	2418.17	0.00	0.00	33.1	2418.20	0.00	0.00	34.0	

ID  
7 SECTION 7.00 TIME = 16.51 HRS WS =2416.93 WIDTH = 15.8

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2417.20	0.00	0.00	5.0	2417.18	0.00	0.00	5.9	2417.15	0.00	0.00	6.8	
2417.13	0.00	0.00	7.6	2417.10	0.00	0.00	8.5	2417.08	0.00	0.00	9.4	
2417.05	0.00	0.00	10.2	2417.03	0.00	0.00	11.1	2416.96	0.00	-0.04	12.0	
2416.79	0.00	-0.04	12.6	2416.50	0.00	-0.17	13.4	2416.42	0.00	-0.08	14.0	
2416.22	0.00	0.02	15.0	2416.22	0.00	0.05	15.8	2416.22	0.00	0.08	16.7	
2416.22	0.00	0.12	17.5	2416.22	0.00	0.15	18.3	2416.22	0.00	0.18	19.2	
2416.22	0.00	0.22	20.0	2416.22	0.00	0.18	20.8	2416.22	0.00	0.15	21.7	
2416.22	0.00	0.12	22.5	2416.22	0.00	0.08	23.3	2416.22	0.00	0.05	24.2	
2416.22	0.00	0.02	25.0	2416.42	0.00	-0.08	26.0	2416.50	0.00	-0.17	26.6	
2416.79	0.00	-0.04	27.4	2416.96	0.00	-0.04	28.0	2417.03	0.00	0.00	28.9	
2417.06	0.00	0.00	29.7	2417.09	0.00	0.00	30.6	2417.11	0.00	0.00	31.4	
2417.14	0.00	0.00	32.3	2417.17	0.00	0.00	33.1	2417.20	0.00	0.00	34.0	

ID  
6 SECTION 6.00 TIME = 16.51 HRS WS =2415.93 WIDTH = 17.1

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2416.20	0.00	0.00	5.0	2416.18	0.00	0.00	5.9	2416.15	0.00	0.00	6.8	
2416.13	0.00	0.00	7.6	2416.10	0.00	0.00	8.5	2416.08	0.00	0.00	9.4	
2416.05	0.00	0.00	10.2	2416.03	0.00	0.00	11.1	2415.78	0.00	-0.22	11.9	
2415.58	0.00	-0.25	12.4	2415.44	0.00	-0.22	13.4	2415.49	0.00	-0.01	14.0	
2415.25	0.00	0.05	15.0	2415.25	0.00	0.08	15.8	2415.24	0.00	0.11	16.7	
2415.24	0.00	0.14	17.5	2415.24	0.00	0.18	18.3	2415.24	0.00	0.21	19.2	
2415.24	0.00	0.24	20.0	2415.24	0.00	0.21	20.8	2415.24	0.00	0.18	21.7	
2415.24	0.00	0.14	22.5	2415.24	0.00	0.11	23.3	2415.25	0.00	0.08	24.2	
2415.25	0.00	0.05	25.0	2415.49	0.00	-0.01	26.0	2415.44	0.00	-0.22	26.6	
2415.58	0.00	-0.25	27.6	2415.78	0.00	-0.22	28.1	2416.03	0.00	0.00	28.9	

2416.06 0.00 0.00 29.7 2416.09 0.00 0.00 30.6 2416.11 0.00 0.00 31.4  
 2416.14 0.00 0.00 32.3 2416.17 0.00 0.00 33.1 2416.20 0.00 0.00 34.0

ID  
 5 SECTION 5.00 TIME = 16.51 HRS WS =2414.93 WIDTH = 16.0

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2415.20 0.00 0.00 5.0 2415.18 0.00 0.00 5.9 2415.15 0.00 0.00 6.8  
 2415.13 0.00 0.00 7.6 2415.10 0.00 0.00 8.5 2415.08 0.00 0.00 9.4  
 2415.05 0.00 0.00 10.2 2415.03 0.00 0.00 11.1 2414.93 0.00 -0.07 12.0  
 2414.65 0.00 -0.18 12.5 2414.52 0.00 -0.15 13.3 2414.45 0.00 -0.05 14.0  
 2414.23 0.00 0.03 15.0 2414.23 0.00 0.06 15.8 2414.23 0.00 0.09 16.7  
 2414.23 0.00 0.13 17.5 2414.23 0.00 0.16 18.3 2414.23 0.00 0.19 19.2  
 2414.23 0.00 0.23 20.0 2414.23 0.00 0.19 20.8 2414.23 0.00 0.16 21.7  
 2414.23 0.00 0.13 22.5 2414.23 0.00 0.09 23.3 2414.23 0.00 0.06 24.2  
 2414.23 0.00 0.03 25.0 2414.45 0.00 -0.05 26.0 2414.52 0.00 -0.15 26.7  
 2414.65 0.00 -0.18 27.5 2414.93 0.00 -0.07 28.0 2415.03 0.00 0.00 28.9  
 2415.06 0.00 0.00 29.7 2415.09 0.00 0.00 30.6 2415.11 0.00 0.00 31.4  
 2415.14 0.00 0.00 32.3 2415.17 0.00 0.00 33.1 2415.20 0.00 0.00 34.0

ID  
 4 SECTION 4.00 TIME = 16.51 HRS WS =2413.93 WIDTH = 17.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2414.20 0.00 0.00 5.0 2414.18 0.00 0.00 5.9 2414.15 0.00 0.00 6.8  
 2414.13 0.00 0.00 7.6 2414.10 0.00 0.00 8.5 2414.08 0.00 0.00 9.4  
 2414.05 0.00 0.00 10.2 2414.03 0.00 0.00 11.1 2413.76 0.00 -0.24 11.9  
 2413.56 0.00 -0.27 12.5 2413.41 0.00 -0.26 13.3 2413.47 0.00 -0.03 14.0  
 2413.26 0.00 0.06 15.0 2413.26 0.00 0.09 15.8 2413.26 0.00 0.12 16.7  
 2413.25 0.00 0.15 17.5 2413.25 0.00 0.18 18.3 2413.24 0.00 0.21 19.2  
 2413.24 0.00 0.24 20.0 2413.24 0.00 0.21 20.8 2413.25 0.00 0.18 21.7  
 2413.25 0.00 0.15 22.5 2413.26 0.00 0.12 23.3 2413.26 0.00 0.09 24.2  
 2413.26 0.00 0.06 25.0 2413.47 0.00 -0.03 26.0 2413.41 0.00 -0.26 26.7  
 2413.56 0.00 -0.27 27.5 2413.76 0.00 -0.24 28.1 2414.03 0.00 0.00 28.9  
 2414.06 0.00 0.00 29.7 2414.09 0.00 0.00 30.6 2414.11 0.00 0.00 31.4  
 2414.14 0.00 0.00 32.3 2414.17 0.00 0.00 33.1 2414.20 0.00 0.00 34.0

ID  
 3 SECTION 3.00 TIME = 16.51 HRS WS =2412.93 WIDTH = 16.0

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2413.20 0.00 0.00 5.0 2413.18 0.00 0.00 5.9 2413.15 0.00 0.00 6.8  
 2413.13 0.00 0.00 7.6 2413.10 0.00 0.00 8.5 2413.08 0.00 0.00 9.4  
 2413.05 0.00 0.00 10.2 2413.03 0.00 0.00 11.1 2412.93 0.00 -0.07 12.0  
 2412.62 0.00 -0.21 12.5 2412.46 0.00 -0.21 13.3 2412.47 0.00 -0.03 14.0  
 2412.24 0.00 0.04 15.0 2412.24 0.00 0.07 15.8 2412.24 0.00 0.10 16.7  
 2412.24 0.00 0.14 17.5 2412.24 0.00 0.17 18.3 2412.24 0.00 0.20 19.2  
 2412.24 0.00 0.24 20.0 2412.24 0.00 0.20 20.8 2412.24 0.00 0.17 21.7  
 2412.24 0.00 0.14 22.5 2412.24 0.00 0.10 23.3 2412.24 0.00 0.07 24.2  
 2412.24 0.00 0.04 25.0 2412.47 0.00 -0.03 26.0 2412.46 0.00 -0.21 26.7  
 2412.62 0.00 -0.21 27.5 2412.93 0.00 -0.07 28.0 2413.03 0.00 0.00 28.9  
 2413.06 0.00 0.00 29.7 2413.09 0.00 0.00 30.6 2413.11 0.00 0.00 31.4  
 2413.14 0.00 0.00 32.3 2413.17 0.00 0.00 33.1 2413.20 0.00 0.00 34.0

ID  
 2 SECTION 2.00 TIME = 16.51 HRS WS =2411.93 WIDTH = 15.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2412.23	0.00	0.00	5.0	2412.18	0.00	0.00	5.9	2412.15	0.00	0.00	6.8
2412.13	0.00	0.00	7.6	2412.10	0.00	0.00	8.5	2412.08	0.00	0.00	9.4
2412.05	0.00	0.00	10.2	2412.03	0.00	0.00	11.1	2411.95	0.00	-0.05	12.0
2411.63	0.00	-0.21	12.5	2411.40	0.00	-0.26	13.3	2411.40	0.00	-0.10	14.0
2411.26	0.00	0.06	15.0	2411.26	0.00	0.09	15.8	2411.26	0.00	0.12	16.7
2411.25	0.00	0.15	17.5	2411.25	0.00	0.19	18.3	2411.25	0.00	0.22	19.2
2411.25	0.00	0.25	20.0	2411.25	0.00	0.22	20.8	2411.25	0.00	0.19	21.7
2411.25	0.00	0.15	22.5	2411.26	0.00	0.12	23.3	2411.26	0.00	0.09	24.2
2411.26	0.00	0.06	25.0	2411.40	0.00	-0.10	26.0	2411.40	0.00	-0.26	26.7
2411.63	0.00	-0.21	27.5	2411.95	0.00	-0.05	28.0	2412.03	0.00	0.00	28.9
2412.06	0.00	0.00	29.7	2412.09	0.00	0.00	30.6	2412.11	0.00	0.00	31.4
2412.14	0.00	0.00	32.3	2412.17	0.00	0.00	33.1	2412.23	0.00	0.00	34.0

ID  
1 SECTION 1.00 TIME = 16.51 HRS WS =2410.83 WIDTH = 15.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2411.20	0.00	0.00	5.0	2411.18	0.00	0.00	5.9	2411.15	0.00	0.00	6.8
2411.13	0.00	0.00	7.6	2411.10	0.00	0.00	8.5	2411.08	0.00	0.00	9.4
2411.05	0.00	0.00	10.2	2411.03	0.00	0.00	11.1	2411.00	0.00	0.00	12.0
2410.73	0.00	-0.10	12.7	2410.33	0.00	-0.34	13.2	2410.16	0.00	-0.34	14.0
2410.16	0.00	-0.04	15.0	2410.15	0.00	-0.01	15.8	2410.15	0.00	0.02	16.7
2410.15	0.00	0.05	17.5	2410.15	0.00	0.09	18.3	2410.15	0.00	0.12	19.2
2410.15	0.00	0.15	20.0	2410.15	0.00	0.12	20.8	2410.15	0.00	0.09	21.7
2410.15	0.00	0.05	22.5	2410.15	0.00	0.02	23.3	2410.15	0.00	-0.01	24.2
2410.16	0.00	-0.04	25.0	2410.16	0.00	-0.34	26.0	2410.33	0.00	-0.34	26.8
2410.73	0.00	-0.10	27.3	2411.00	0.00	0.00	28.0	2411.03	0.00	0.00	28.9
2411.06	0.00	0.00	29.7	2411.09	0.00	0.00	30.6	2411.11	0.00	0.00	31.4
2411.14	0.00	0.00	32.3	2411.17	0.00	0.00	33.1	2411.20	0.00	0.00	34.0

1  
TIME = 20.80 HRS DT = 60 SECS TIME STEP = 1200

SECTION W.S.ELEV. WIDTH DEPTH Q V SLOPE D50 QS/Q FR SED. YIELD  
FT FT FT CFS FPS MM 1000 PPM TONS

1.000	2410.83	15.2	0.68	40	4.27	0.010091	0.28	14.28	0.96	0.124E+04
2.000	2411.93	15.9	0.68	40	4.22	0.010254	0.28	14.25	0.96	0.124E+04
3.000	2412.93	16.0	0.69	40	4.21	0.010230	0.28	14.20	0.96	0.124E+04
4.000	2413.93	17.2	0.69	40	4.13	0.010501	0.28	14.17	0.97	0.124E+04
5.000	2414.93	16.0	0.70	40	4.21	0.010210	0.28	14.16	0.96	0.124E+04
6.000	2415.93	17.1	0.69	40	4.14	0.010554	0.28	14.30	0.97	0.126E+04
7.000	2416.93	15.8	0.71	40	4.23	0.010232	0.28	14.33	0.96	0.126E+04
8.000	2417.83	16.5	0.71	40	4.20	0.010482	0.28	14.48	0.97	0.127E+04
9.000	2419.33	27.9	0.66	40	3.32	0.009567	0.50	14.62	0.89	0.129E+04
10.000	2419.83	14.7	0.72	40	4.34	0.010205	0.29	14.75	0.97	0.131E+04
11.000	2421.23	27.6	0.73	40	3.34	0.009722	0.51	14.90	0.90	0.132E+04
12.000	2422.03	17.2	0.75	40	4.19	0.011028	0.29	15.02	0.99	0.133E+04
13.000	2422.93	15.4	0.93	40	3.93	0.007731	0.52	15.07	0.85	0.134E+04

ID  
12 SECTION 12.00 TIME = 20.80 HRS WS =2422.03 WIDTH = 17.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2422.23	0.00	0.00	5.0	2422.18	0.00	0.00	5.9	2422.15	0.00	0.00	6.8
2422.13	0.00	0.00	7.6	2422.10	0.00	0.00	8.5	2422.08	0.00	0.00	9.4
2422.05	0.00	0.00	10.2	2422.03	0.00	0.00	11.1	2422.01	0.00	0.01	12.0
2421.87	0.00	0.04	12.7	2421.73	0.00	0.06	13.3	2421.58	0.00	0.08	14.0
2421.31	0.00	0.11	15.0	2421.28	0.00	0.12	15.8	2421.28	0.00	0.15	16.7
2421.28	0.00	0.18	17.5	2421.28	0.00	0.21	18.3	2421.28	0.00	0.25	19.2
2421.28	0.00	0.28	20.0	2421.28	0.00	0.25	20.8	2421.28	0.00	0.21	21.7

2421.28	0.00	0.18	22.5	2421.28	0.00	0.15	23.3	2421.28	0.00	0.12	24.2
2421.31	0.00	0.11	25.0	2421.58	0.00	0.08	26.0	2421.73	0.00	0.06	26.7
2421.87	0.00	0.04	27.3	2422.01	0.00	0.01	28.0	2422.07	0.00	0.00	28.7
2422.13	0.00	0.00	29.3	2422.23	0.00	0.00	30.0				

ID  
11 SECTION 11.00 TIME = 20.80 HRS WS =2421.23 WIDTH = 27.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2421.43	0.00	0.00	5.0	2421.18	0.00	0.00	5.9	2421.15	0.00	0.00	6.8
2421.13	0.00	0.01	7.6	2421.11	0.00	0.01	8.5	2421.08	0.00	0.01	9.4
2421.06	0.00	0.01	10.2	2421.04	0.00	0.01	11.1	2420.98	0.00	-0.02	12.0
2420.84	0.00	0.01	12.6	2420.75	0.00	0.08	13.3	2420.60	0.00	0.10	14.0
2420.50	0.00	0.30	15.0	2420.50	0.00	0.33	15.8	2420.50	0.00	0.36	16.7
2420.50	0.00	0.40	17.5	2420.50	0.00	0.43	18.3	2420.50	0.00	0.46	19.2
2420.50	0.00	0.50	20.0	2420.50	0.00	0.46	20.8	2420.50	0.00	0.43	21.7
2420.50	0.00	0.40	22.5	2420.50	0.00	0.36	23.3	2420.50	0.00	0.33	24.2
2420.50	0.00	0.30	25.0	2420.60	0.00	0.10	26.0	2420.75	0.00	0.08	26.7
2420.84	0.00	0.01	27.4	2421.04	0.00	0.04	28.0	2421.04	0.00	0.01	28.9
2421.07	0.00	0.01	29.7	2421.09	0.00	0.01	30.6	2421.13	0.00	0.02	31.4
2421.14	0.00	0.00	32.3	2421.17	0.00	0.00	33.1	2421.43	0.00	0.00	34.0

ID  
10 SECTION 10.00 TIME = 20.80 HRS WS =2419.83 WIDTH = 14.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2420.20	0.00	0.00	5.0	2420.18	0.00	0.00	5.9	2420.15	0.00	0.00	6.8
2420.13	0.00	0.00	7.6	2420.10	0.00	0.00	8.5	2420.08	0.00	0.00	9.4
2420.05	0.00	0.00	10.2	2420.03	0.00	0.00	11.1	2420.00	0.00	0.00	12.0
2419.82	0.00	-0.01	12.7	2419.45	0.00	-0.22	13.2	2419.39	0.00	-0.11	14.0
2419.11	0.00	-0.09	15.0	2419.11	0.00	-0.06	15.8	2419.11	0.00	-0.03	16.7
2419.11	0.00	0.01	17.5	2419.11	0.00	0.04	18.3	2419.11	0.00	0.08	19.2
2419.11	0.00	0.11	20.0	2419.11	0.00	0.08	20.8	2419.11	0.00	0.04	21.7
2419.11	0.00	0.01	22.5	2419.11	0.00	-0.02	23.3	2419.11	0.00	-0.06	24.2
2419.11	0.00	-0.09	25.0	2419.39	0.00	-0.11	26.0	2419.45	0.00	-0.22	26.8
2419.82	0.00	-0.01	27.3	2420.00	0.00	0.00	28.0	2420.03	0.00	0.00	28.9
2420.06	0.00	0.00	29.7	2420.09	0.00	0.00	30.6	2420.11	0.00	0.00	31.4
2420.14	0.00	0.00	32.3	2420.17	0.00	0.00	33.1	2420.20	0.00	0.00	34.0

ID  
9 SECTION 9.00 TIME = 20.80 HRS WS =2419.33 WIDTH = 27.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2419.53	0.00	0.00	5.0	2419.19	0.00	0.02	5.9	2419.16	0.00	0.01	6.8
2419.19	0.00	0.07	7.6	2419.15	0.00	0.05	8.5	2419.16	0.00	0.08	9.4
2419.14	0.00	0.09	10.2	2419.10	0.00	0.08	11.1	2419.02	0.00	0.02	12.0
2418.86	0.00	0.02	12.6	2418.74	0.00	0.07	13.3	2418.70	0.00	0.20	14.0
2418.67	0.00	0.47	15.0	2418.67	0.00	0.50	15.8	2418.67	0.00	0.53	16.7
2418.67	0.00	0.57	17.5	2418.67	0.00	0.60	18.3	2418.67	0.00	0.63	19.2
2418.67	0.00	0.67	20.0	2418.67	0.00	0.63	20.8	2418.67	0.00	0.60	21.7
2418.67	0.00	0.57	22.5	2418.67	0.00	0.53	23.3	2418.67	0.00	0.50	24.2
2418.67	0.00	0.47	25.0	2418.70	0.00	0.20	26.0	2418.74	0.00	0.07	26.7
2418.86	0.00	0.02	27.4	2419.02	0.00	0.02	28.0	2419.10	0.00	0.08	28.9
2419.15	0.00	0.09	29.7	2419.14	0.00	0.06	30.6	2419.19	0.00	0.08	31.4
2419.21	0.00	0.06	32.3	2419.25	0.00	0.08	33.1	2419.53	0.00	0.00	34.0

ID  
8 SECTION 8.00 TIME = 20.80 HRS WS =2417.83 WIDTH = 16.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2418.20	0.00	0.00	5.0	2418.18	0.00	0.00	5.9	2418.15	0.00	0.00	6.8
2418.13	0.00	0.00	7.6	2418.10	0.00	0.00	8.5	2418.08	0.00	0.00	9.4
2418.05	0.00	0.00	10.2	2418.03	0.00	0.00	11.1	2417.78	0.00	-0.22	11.9
2417.56	0.00	-0.27	12.4	2417.46	0.00	-0.21	13.3	2417.36	0.00	-0.14	14.0
2417.12	0.00	-0.08	15.0	2417.12	0.00	-0.04	15.8	2417.12	0.00	-0.01	16.7
2417.12	0.00	0.02	17.5	2417.12	0.00	0.06	18.3	2417.12	0.00	0.09	19.2
2417.12	0.00	0.12	20.0	2417.12	0.00	0.09	20.8	2417.12	0.00	0.06	21.7
2417.12	0.00	0.02	22.5	2417.12	0.00	-0.01	23.3	2417.12	0.00	-0.04	24.2
2417.12	0.00	-0.08	25.0	2417.36	0.00	-0.14	26.0	2417.46	0.00	-0.21	26.7
2417.56	0.00	-0.28	27.6	2417.78	0.00	-0.22	28.1	2418.03	0.00	0.00	28.9
2418.06	0.00	0.00	29.7	2418.09	0.00	0.00	30.6	2418.11	0.00	0.00	31.4
2418.14	0.00	0.00	32.3	2418.17	0.00	0.00	33.1	2418.20	0.00	0.00	34.0

ID  
7 SECTION 7.00 TIME = 20.80 HRS WS =2416.93 WIDTH = 15.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2417.20	0.00	0.00	5.0	2417.18	0.00	0.00	5.9	2417.15	0.00	0.00	6.8
2417.13	0.00	0.00	7.6	2417.10	0.00	0.00	8.5	2417.08	0.00	0.00	9.4
2417.05	0.00	0.00	10.2	2417.03	0.00	0.00	11.1	2416.96	0.00	-0.04	12.0
2416.79	0.00	-0.04	12.6	2416.50	0.00	-0.17	13.4	2416.42	0.00	-0.08	14.0
2416.22	0.00	0.02	15.0	2416.22	0.00	0.05	15.8	2416.22	0.00	0.08	16.7
2416.22	0.00	0.12	17.5	2416.22	0.00	0.15	18.3	2416.22	0.00	0.18	19.2
2416.22	0.00	0.22	20.0	2416.22	0.00	0.18	20.8	2416.22	0.00	0.15	21.7
2416.22	0.00	0.12	22.5	2416.22	0.00	0.08	23.3	2416.22	0.00	0.05	24.2
2416.22	0.00	0.02	25.0	2416.42	0.00	-0.08	26.0	2416.50	0.00	-0.17	26.6
2416.79	0.00	-0.04	27.4	2416.96	0.00	-0.04	28.0	2417.03	0.00	0.00	28.9
2417.06	0.00	0.00	29.7	2417.09	0.00	0.00	30.6	2417.11	0.00	0.00	31.4
2417.14	0.00	0.00	32.3	2417.17	0.00	0.00	33.1	2417.20	0.00	0.00	34.0

ID  
6 SECTION 6.00 TIME = 20.80 HRS WS =2415.93 WIDTH = 17.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2416.20	0.00	0.00	5.0	2416.18	0.00	0.00	5.9	2416.15	0.00	0.00	6.8
2416.13	0.00	0.00	7.6	2416.10	0.00	0.00	8.5	2416.08	0.00	0.00	9.4
2416.05	0.00	0.00	10.2	2416.03	0.00	0.00	11.1	2415.78	0.00	-0.22	11.9
2415.58	0.00	-0.25	12.4	2415.44	0.00	-0.22	13.4	2415.49	0.00	-0.01	14.0
2415.25	0.00	0.05	15.0	2415.25	0.00	0.08	15.8	2415.24	0.00	0.11	16.7
2415.24	0.00	0.14	17.5	2415.24	0.00	0.18	18.3	2415.24	0.00	0.21	19.2
2415.24	0.00	0.24	20.0	2415.24	0.00	0.21	20.8	2415.24	0.00	0.18	21.7
2415.24	0.00	0.14	22.5	2415.24	0.00	0.11	23.3	2415.25	0.00	0.08	24.2
2415.25	0.00	0.05	25.0	2415.49	0.00	-0.01	26.0	2415.44	0.00	-0.22	26.6
2415.58	0.00	-0.25	27.6	2415.78	0.00	-0.22	28.1	2416.03	0.00	0.00	28.9
2416.06	0.00	0.00	29.7	2416.09	0.00	0.00	30.6	2416.11	0.00	0.00	31.4
2416.14	0.00	0.00	32.3	2416.17	0.00	0.00	33.1	2416.20	0.00	0.00	34.0

ID  
5 SECTION 5.00 TIME = 20.80 HRS WS =2414.93 WIDTH = 16.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2415.20	0.00	0.00	5.0	2415.18	0.00	0.00	5.9	2415.15	0.00	0.00	6.8
2415.13	0.00	0.00	7.6	2415.10	0.00	0.00	8.5	2415.08	0.00	0.00	9.4
2415.05	0.00	0.00	10.2	2415.03	0.00	0.00	11.1	2414.93	0.00	-0.07	12.0
2414.65	0.00	-0.18	12.5	2414.52	0.00	-0.15	13.3	2414.45	0.00	-0.05	14.0
2414.23	0.00	0.03	15.0	2414.23	0.00	0.06	15.8	2414.23	0.00	0.09	16.7
2414.23	0.00	0.13	17.5	2414.23	0.00	0.16	18.3	2414.23	0.00	0.19	19.2

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2414.23	0.00	0.23	20.0	2414.23	0.00	0.19	20.8	2414.23	0.00	0.16	21.7	
2414.23	0.00	0.13	22.5	2414.23	0.00	0.09	23.3	2414.23	0.00	0.06	24.2	
2414.23	0.00	0.03	25.0	2414.45	0.00	-0.05	26.0	2414.52	0.00	-0.15	26.7	
2414.65	0.00	-0.18	27.5	2414.93	0.00	-0.07	28.0	2415.03	0.00	0.00	28.9	
2415.06	0.00	0.00	29.7	2415.09	0.00	0.00	30.6	2415.11	0.00	0.00	31.4	
2415.14	0.00	0.00	32.3	2415.17	0.00	0.00	33.1	2415.20	0.00	0.00	34.0	

ID  
4 SECTION 4.00 TIME = 20.80 HRS WS =2413.93 WIDTH = 17.2

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2414.20	0.00	0.00	5.0	2414.18	0.00	0.00	5.9	2414.15	0.00	0.00	6.8	
2414.13	0.00	0.00	7.6	2414.10	0.00	0.00	8.5	2414.08	0.00	0.00	9.4	
2414.05	0.00	0.00	10.2	2414.03	0.00	0.00	11.1	2413.76	0.00	-0.24	11.9	
2413.56	0.00	-0.27	12.5	2413.41	0.00	-0.26	13.3	2413.47	0.00	-0.03	14.0	
2413.26	0.00	0.06	15.0	2413.26	0.00	0.09	15.8	2413.26	0.00	0.12	16.7	
2413.25	0.00	0.15	17.5	2413.25	0.00	0.18	18.3	2413.24	0.00	0.21	19.2	
2413.24	0.00	0.24	20.0	2413.24	0.00	0.21	20.8	2413.25	0.00	0.18	21.7	
2413.25	0.00	0.15	22.5	2413.26	0.00	0.12	23.3	2413.26	0.00	0.09	24.2	
2413.26	0.00	0.06	25.0	2413.47	0.00	-0.03	26.0	2413.41	0.00	-0.26	26.7	
2413.56	0.00	-0.27	27.5	2413.76	0.00	-0.24	28.1	2414.03	0.00	0.00	28.9	
2414.06	0.00	0.00	29.7	2414.09	0.00	0.00	30.6	2414.11	0.00	0.00	31.4	
2414.14	0.00	0.00	32.3	2414.17	0.00	0.00	33.1	2414.20	0.00	0.00	34.0	

ID  
3 SECTION 3.00 TIME = 20.80 HRS WS =2412.93 WIDTH = 16.0

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2413.20	0.00	0.00	5.0	2413.18	0.00	0.00	5.9	2413.15	0.00	0.00	6.8	
2413.13	0.00	0.00	7.6	2413.10	0.00	0.00	8.5	2413.08	0.00	0.00	9.4	
2413.05	0.00	0.00	10.2	2413.03	0.00	0.00	11.1	2412.93	0.00	-0.07	12.0	
2412.62	0.00	-0.21	12.5	2412.46	0.00	-0.21	13.3	2412.47	0.00	-0.03	14.0	
2412.24	0.00	0.04	15.0	2412.24	0.00	0.07	15.8	2412.24	0.00	0.10	16.7	
2412.24	0.00	0.14	17.5	2412.24	0.00	0.17	18.3	2412.24	0.00	0.20	19.2	
2412.24	0.00	0.24	20.0	2412.24	0.00	0.20	20.8	2412.24	0.00	0.17	21.7	
2412.24	0.00	0.14	22.5	2412.24	0.00	0.10	23.3	2412.24	0.00	0.07	24.2	
2412.24	0.00	0.04	25.0	2412.47	0.00	-0.03	26.0	2412.46	0.00	-0.21	26.7	
2412.62	0.00	-0.21	27.5	2412.93	0.00	-0.07	28.0	2413.03	0.00	0.00	28.9	
2413.06	0.00	0.00	29.7	2413.09	0.00	0.00	30.6	2413.11	0.00	0.00	31.4	
2413.14	0.00	0.00	32.3	2413.17	0.00	0.00	33.1	2413.20	0.00	0.00	34.0	

ID  
2 SECTION 2.00 TIME = 20.80 HRS WS =2411.93 WIDTH = 15.9

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2412.23	0.00	0.00	5.0	2412.18	0.00	0.00	5.9	2412.15	0.00	0.00	6.8	
2412.13	0.00	0.00	7.6	2412.10	0.00	0.00	8.5	2412.08	0.00	0.00	9.4	
2412.05	0.00	0.00	10.2	2412.03	0.00	0.00	11.1	2411.95	0.00	-0.05	12.0	
2411.63	0.00	-0.21	12.5	2411.40	0.00	-0.26	13.3	2411.40	0.00	-0.10	14.0	
2411.26	0.00	0.06	15.0	2411.26	0.00	0.09	15.8	2411.26	0.00	0.12	16.7	
2411.25	0.00	0.15	17.5	2411.25	0.00	0.19	18.3	2411.25	0.00	0.22	19.2	
2411.25	0.00	0.25	20.0	2411.25	0.00	0.22	20.8	2411.25	0.00	0.19	21.7	
2411.25	0.00	0.15	22.5	2411.26	0.00	0.12	23.3	2411.26	0.00	0.09	24.2	
2411.26	0.00	0.06	25.0	2411.40	0.00	-0.10	26.0	2411.40	0.00	-0.26	26.7	
2411.63	0.00	-0.21	27.5	2411.95	0.00	-0.05	28.0	2412.03	0.00	0.00	28.9	
2412.06	0.00	0.00	29.7	2412.09	0.00	0.00	30.6	2412.11	0.00	0.00	31.4	
2412.14	0.00	0.00	32.3	2412.17	0.00	0.00	33.1	2412.23	0.00	0.00	34.0	

ID

1 SECTION 1.00 TIME = 20.80 HRS WS =2410.83 WIDTH = 15.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2411.20	0.00	0.00	5.0	2411.18	0.00	0.00	5.9	2411.15	0.00	0.00	6.8
2411.13	0.00	0.00	7.6	2411.10	0.00	0.00	8.5	2411.08	0.00	0.00	9.4
2411.05	0.00	0.00	10.2	2411.03	0.00	0.00	11.1	2411.00	0.00	0.00	12.0
2410.73	0.00	-0.10	12.7	2410.33	0.00	-0.34	13.2	2410.16	0.00	-0.34	14.0
2410.16	0.00	-0.04	15.0	2410.15	0.00	-0.01	15.8	2410.15	0.00	0.02	16.7
2410.15	0.00	0.05	17.5	2410.15	0.00	0.09	18.3	2410.15	0.00	0.12	19.2
2410.15	0.00	0.15	20.0	2410.15	0.00	0.12	20.8	2410.15	0.00	0.09	21.7
2410.15	0.00	0.05	22.5	2410.15	0.00	0.02	23.3	2410.15	0.00	-0.01	24.2
2410.16	0.00	-0.04	25.0	2410.16	0.00	-0.34	26.0	2410.33	0.00	-0.34	26.8
2410.73	0.00	-0.10	27.3	2411.00	0.00	0.00	28.0	2411.03	0.00	0.00	28.9
2411.06	0.00	0.00	29.7	2411.09	0.00	0.00	30.6	2411.11	0.00	0.00	31.4
2411.14	0.00	0.00	32.3	2411.17	0.00	0.00	33.1	2411.20	0.00	0.00	34.0

1

TIME = 25.80 HRS DT = 60 SECS TIME STEP = 1500

SECTION W.S.ELEV. WIDTH DEPTH Q V SLOPE D50 QS/Q FR SED. YIELD  
 FT FT FT CFS FPS MM 1000 PPM TONS

1.000	2410.83	15.2	0.68	40	4.27 0.010091	0.28	14.28	0.96	0.156E+04
2.000	2411.93	15.9	0.68	40	4.22 0.010254	0.28	14.25	0.96	0.156E+04
3.000	2412.93	16.0	0.69	40	4.21 0.010230	0.28	14.20	0.96	0.156E+04
4.000	2413.93	17.2	0.69	40	4.13 0.010501	0.28	14.17	0.97	0.156E+04
5.000	2414.93	16.0	0.70	40	4.21 0.010210	0.28	14.16	0.96	0.156E+04
6.000	2415.93	17.1	0.69	40	4.14 0.010554	0.28	14.30	0.97	0.158E+04
7.000	2416.93	15.8	0.71	40	4.23 0.010232	0.28	14.33	0.96	0.158E+04
8.000	2417.83	16.5	0.71	40	4.20 0.010482	0.28	14.48	0.97	0.160E+04
9.000	2419.33	27.9	0.66	40	3.32 0.009567	0.50	14.62	0.89	0.161E+04
10.000	2419.83	14.7	0.72	40	4.34 0.010205	0.29	14.75	0.97	0.164E+04
11.000	2421.23	27.6	0.73	40	3.34 0.009722	0.51	14.90	0.90	0.165E+04
12.000	2422.03	17.2	0.75	40	4.19 0.011028	0.29	15.02	0.99	0.167E+04
13.000	2422.93	15.4	0.93	40	3.93 0.007731	0.52	15.07	0.85	0.168E+04

ID

12 SECTION 12.00 TIME = 25.80 HRS WS =2422.03 WIDTH = 17.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2422.23	0.00	0.00	5.0	2422.18	0.00	0.00	5.9	2422.15	0.00	0.00	6.8
2422.13	0.00	0.00	7.6	2422.10	0.00	0.00	8.5	2422.08	0.00	0.00	9.4
2422.05	0.00	0.00	10.2	2422.03	0.00	0.00	11.1	2422.01	0.00	0.01	12.0
2421.87	0.00	0.04	12.7	2421.73	0.00	0.06	13.3	2421.58	0.00	0.08	14.0
2421.31	0.00	0.11	15.0	2421.28	0.00	0.12	15.8	2421.28	0.00	0.15	16.7
2421.28	0.00	0.18	17.5	2421.28	0.00	0.21	18.3	2421.28	0.00	0.25	19.2
2421.28	0.00	0.28	20.0	2421.28	0.00	0.25	20.8	2421.28	0.00	0.21	21.7
2421.28	0.00	0.18	22.5	2421.28	0.00	0.15	23.3	2421.28	0.00	0.12	24.2
2421.31	0.00	0.11	25.0	2421.58	0.00	0.08	26.0	2421.73	0.00	0.06	26.7
2421.87	0.00	0.04	27.3	2422.01	0.00	0.01	28.0	2422.07	0.00	0.00	28.7
2422.13	0.00	0.00	29.3	2422.23	0.00	0.00	30.0				

ID

11 SECTION 11.00 TIME = 25.80 HRS WS =2421.23 WIDTH = 27.6

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2421.43	0.00	0.00	5.0	2421.18	0.00	0.00	5.9	2421.15	0.00	0.00	6.8
2421.13	0.00	0.01	7.6	2421.11	0.00	0.01	8.5	2421.08	0.00	0.01	9.4
2421.06	0.00	0.01	10.2	2421.04	0.00	0.01	11.1	2420.98	0.00	-0.02	12.0
2420.84	0.00	0.01	12.6	2420.75	0.00	0.08	13.3	2420.60	0.00	0.10	14.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2420.50	0.00	0.30	15.0	2420.50	0.00	0.33	15.8	2420.50	0.00	0.36	16.7	
2420.50	0.00	0.40	17.5	2420.50	0.00	0.43	18.3	2420.50	0.00	0.46	19.2	
2420.50	0.00	0.50	20.0	2420.50	0.00	0.46	20.8	2420.50	0.00	0.43	21.7	
2420.50	0.00	0.40	22.5	2420.50	0.00	0.36	23.3	2420.50	0.00	0.33	24.2	
2420.50	0.00	0.30	25.0	2420.60	0.00	0.10	26.0	2420.75	0.00	0.08	26.7	
2420.84	0.00	0.01	27.4	2421.04	0.00	0.04	28.0	2421.04	0.00	0.01	28.9	
2421.07	0.00	0.01	29.7	2421.09	0.00	0.01	30.6	2421.13	0.00	0.02	31.4	
2421.14	0.00	0.00	32.3	2421.17	0.00	0.00	33.1	2421.43	0.00	0.00	34.0	

ID  
10 SECTION 10.00 TIME = 25.80 HRS WS =2419.83 WIDTH = 14.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2420.20	0.00	0.00	5.0	2420.18	0.00	0.00	5.9	2420.15	0.00	0.00	6.8	
2420.13	0.00	0.00	7.6	2420.10	0.00	0.00	8.5	2420.08	0.00	0.00	9.4	
2420.05	0.00	0.00	10.2	2420.03	0.00	0.00	11.1	2420.00	0.00	0.00	12.0	
2419.82	0.00	-0.01	12.7	2419.45	0.00	-0.22	13.2	2419.39	0.00	-0.11	14.0	
2419.11	0.00	-0.09	15.0	2419.11	0.00	-0.06	15.8	2419.11	0.00	-0.03	16.7	
2419.11	0.00	0.01	17.5	2419.11	0.00	0.04	18.3	2419.11	0.00	0.08	19.2	
2419.11	0.00	0.11	20.0	2419.11	0.00	0.08	20.8	2419.11	0.00	0.04	21.7	
2419.11	0.00	0.01	22.5	2419.11	0.00	-0.02	23.3	2419.11	0.00	-0.06	24.2	
2419.11	0.00	-0.09	25.0	2419.39	0.00	-0.11	26.0	2419.45	0.00	-0.22	26.8	
2419.82	0.00	-0.01	27.3	2420.00	0.00	0.00	28.0	2420.03	0.00	0.00	28.9	
2420.06	0.00	0.00	29.7	2420.09	0.00	0.00	30.6	2420.11	0.00	0.00	31.4	
2420.14	0.00	0.00	32.3	2420.17	0.00	0.00	33.1	2420.20	0.00	0.00	34.0	

ID  
9 SECTION 9.00 TIME = 25.80 HRS WS =2419.33 WIDTH = 27.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2419.53	0.00	0.00	5.0	2419.19	0.00	0.02	5.9	2419.16	0.00	0.01	6.8	
2419.19	0.00	0.07	7.6	2419.15	0.00	0.05	8.5	2419.16	0.00	0.08	9.4	
2419.14	0.00	0.09	10.2	2419.10	0.00	0.08	11.1	2419.02	0.00	0.02	12.0	
2418.86	0.00	0.02	12.6	2418.74	0.00	0.07	13.3	2418.70	0.00	0.20	14.0	
2418.67	0.00	0.47	15.0	2418.67	0.00	0.50	15.8	2418.67	0.00	0.53	16.7	
2418.67	0.00	0.57	17.5	2418.67	0.00	0.60	18.3	2418.67	0.00	0.63	19.2	
2418.67	0.00	0.67	20.0	2418.67	0.00	0.63	20.8	2418.67	0.00	0.60	21.7	
2418.67	0.00	0.57	22.5	2418.67	0.00	0.53	23.3	2418.67	0.00	0.50	24.2	
2418.67	0.00	0.47	25.0	2418.70	0.00	0.20	26.0	2418.74	0.00	0.07	26.7	
2418.86	0.00	0.02	27.4	2419.02	0.00	0.02	28.0	2419.10	0.00	0.08	28.9	
2419.15	0.00	0.09	29.7	2419.14	0.00	0.06	30.6	2419.19	0.00	0.08	31.4	
2419.21	0.00	0.06	32.3	2419.25	0.00	0.08	33.1	2419.53	0.00	0.00	34.0	

ID  
8 SECTION 8.00 TIME = 25.80 HRS WS =2417.83 WIDTH = 16.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2418.20	0.00	0.00	5.0	2418.18	0.00	0.00	5.9	2418.15	0.00	0.00	6.8	
2418.13	0.00	0.00	7.6	2418.10	0.00	0.00	8.5	2418.08	0.00	0.00	9.4	
2418.05	0.00	0.00	10.2	2418.03	0.00	0.00	11.1	2417.78	0.00	-0.22	11.9	
2417.56	0.00	-0.27	12.4	2417.46	0.00	-0.21	13.3	2417.36	0.00	-0.14	14.0	
2417.12	0.00	-0.08	15.0	2417.12	0.00	-0.04	15.8	2417.12	0.00	-0.01	16.7	
2417.12	0.00	0.02	17.5	2417.12	0.00	0.06	18.3	2417.12	0.00	0.09	19.2	
2417.12	0.00	0.12	20.0	2417.12	0.00	0.09	20.8	2417.12	0.00	0.06	21.7	
2417.12	0.00	0.02	22.5	2417.12	0.00	-0.01	23.3	2417.12	0.00	-0.04	24.2	
2417.12	0.00	-0.08	25.0	2417.36	0.00	-0.14	26.0	2417.46	0.00	-0.21	26.7	
2417.56	0.00	-0.28	27.6	2417.78	0.00	-0.22	28.1	2418.03	0.00	0.00	28.9	
2418.06	0.00	0.00	29.7	2418.09	0.00	0.00	30.6	2418.11	0.00	0.00	31.4	
2418.14	0.00	0.00	32.3	2418.17	0.00	0.00	33.1	2418.20	0.00	0.00	34.0	

## ID

7 SECTION 7.00 TIME = 25.80 HRS WS =2416.93 WIDTH = 15.8

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2417.20	0.00	0.00	5.0	2417.18	0.00	0.00	5.9	2417.15	0.00	0.00	6.8
2417.13	0.00	0.00	7.6	2417.10	0.00	0.00	8.5	2417.08	0.00	0.00	9.4
2417.05	0.00	0.00	10.2	2417.03	0.00	0.00	11.1	2416.96	0.00	-0.04	12.0
2416.79	0.00	-0.04	12.6	2416.50	0.00	-0.17	13.4	2416.42	0.00	-0.08	14.0
2416.22	0.00	0.02	15.0	2416.22	0.00	0.05	15.8	2416.22	0.00	0.08	16.7
2416.22	0.00	0.12	17.5	2416.22	0.00	0.15	18.3	2416.22	0.00	0.18	19.2
2416.22	0.00	0.22	20.0	2416.22	0.00	0.18	20.8	2416.22	0.00	0.15	21.7
2416.22	0.00	0.12	22.5	2416.22	0.00	0.08	23.3	2416.22	0.00	0.05	24.2
2416.22	0.00	0.02	25.0	2416.42	0.00	-0.08	26.0	2416.50	0.00	-0.17	26.6
2416.79	0.00	-0.04	27.4	2416.96	0.00	-0.04	28.0	2417.03	0.00	0.00	28.9
2417.06	0.00	0.00	29.7	2417.09	0.00	0.00	30.6	2417.11	0.00	0.00	31.4
2417.14	0.00	0.00	32.3	2417.17	0.00	0.00	33.1	2417.20	0.00	0.00	34.0

## ID

6 SECTION 6.00 TIME = 25.80 HRS WS =2415.93 WIDTH = 17.1

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2416.20	0.00	0.00	5.0	2416.18	0.00	0.00	5.9	2416.15	0.00	0.00	6.8
2416.13	0.00	0.00	7.6	2416.10	0.00	0.00	8.5	2416.08	0.00	0.00	9.4
2416.05	0.00	0.00	10.2	2416.03	0.00	0.00	11.1	2415.78	0.00	-0.22	11.9
2415.58	0.00	-0.25	12.4	2415.44	0.00	-0.22	13.4	2415.49	0.00	-0.01	14.0
2415.25	0.00	0.05	15.0	2415.25	0.00	0.08	15.8	2415.24	0.00	0.11	16.7
2415.24	0.00	0.14	17.5	2415.24	0.00	0.18	18.3	2415.24	0.00	0.21	19.2
2415.24	0.00	0.24	20.0	2415.24	0.00	0.21	20.8	2415.24	0.00	0.18	21.7
2415.24	0.00	0.14	22.5	2415.24	0.00	0.11	23.3	2415.25	0.00	0.08	24.2
2415.25	0.00	0.05	25.0	2415.49	0.00	-0.01	26.0	2415.44	0.00	-0.22	26.6
2415.58	0.00	-0.25	27.6	2415.78	0.00	-0.22	28.1	2416.03	0.00	0.00	28.9
2416.06	0.00	0.00	29.7	2416.09	0.00	0.00	30.6	2416.11	0.00	0.00	31.4
2416.14	0.00	0.00	32.3	2416.17	0.00	0.00	33.1	2416.20	0.00	0.00	34.0

## ID

5 SECTION 5.00 TIME = 25.80 HRS WS =2414.93 WIDTH = 16.0

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2415.20	0.00	0.00	5.0	2415.18	0.00	0.00	5.9	2415.15	0.00	0.00	6.8
2415.13	0.00	0.00	7.6	2415.10	0.00	0.00	8.5	2415.08	0.00	0.00	9.4
2415.05	0.00	0.00	10.2	2415.03	0.00	0.00	11.1	2414.93	0.00	-0.07	12.0
2414.65	0.00	-0.18	12.5	2414.52	0.00	-0.15	13.3	2414.45	0.00	-0.05	14.0
2414.23	0.00	0.03	15.0	2414.23	0.00	0.06	15.8	2414.23	0.00	0.09	16.7
2414.23	0.00	0.13	17.5	2414.23	0.00	0.16	18.3	2414.23	0.00	0.19	19.2
2414.23	0.00	0.23	20.0	2414.23	0.00	0.19	20.8	2414.23	0.00	0.16	21.7
2414.23	0.00	0.13	22.5	2414.23	0.00	0.09	23.3	2414.23	0.00	0.06	24.2
2414.23	0.00	0.03	25.0	2414.45	0.00	-0.05	26.0	2414.52	0.00	-0.15	26.7
2414.65	0.00	-0.18	27.5	2414.93	0.00	-0.07	28.0	2415.03	0.00	0.00	28.9
2415.06	0.00	0.00	29.7	2415.09	0.00	0.00	30.6	2415.11	0.00	0.00	31.4
2415.14	0.00	0.00	32.3	2415.17	0.00	0.00	33.1	2415.20	0.00	0.00	34.0

## ID

4 SECTION 4.00 TIME = 25.80 HRS WS =2413.93 WIDTH = 17.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2414.20	0.00	0.00	5.0	2414.18	0.00	0.00	5.9	2414.15	0.00	0.00	6.8
2414.13	0.00	0.00	7.6	2414.10	0.00	0.00	8.5	2414.08	0.00	0.00	9.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2414.05	0.00	0.00	10.2	2414.03	0.00	0.00	11.1	2413.76	0.00	-0.24	11.9					
2413.56	0.00	-0.27	12.5	2413.41	0.00	-0.26	13.3	2413.47	0.00	-0.03	14.0					
2413.26	0.00	0.06	15.0	2413.26	0.00	0.09	15.8	2413.26	0.00	0.12	16.7					
2413.25	0.00	0.15	17.5	2413.25	0.00	0.18	18.3	2413.24	0.00	0.21	19.2					
2413.24	0.00	0.24	20.0	2413.24	0.00	0.21	20.8	2413.25	0.00	0.18	21.7					
2413.25	0.00	0.15	22.5	2413.26	0.00	0.12	23.3	2413.26	0.00	0.09	24.2					
2413.26	0.00	0.06	25.0	2413.47	0.00	-0.03	26.0	2413.41	0.00	-0.26	26.7					
2413.56	0.00	-0.27	27.5	2413.76	0.00	-0.24	28.1	2414.03	0.00	0.00	28.9					
2414.06	0.00	0.00	29.7	2414.09	0.00	0.00	30.6	2414.11	0.00	0.00	31.4					
2414.14	0.00	0.00	32.3	2414.17	0.00	0.00	33.1	2414.20	0.00	0.00	34.0					

ID  
3 SECTION 3.00 TIME = 25.80 HRS WS =2412.93 WIDTH = 16.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2413.20	0.00	0.00	5.0	2413.18	0.00	0.00	5.9	2413.15	0.00	0.00	6.8					
2413.13	0.00	0.00	7.6	2413.10	0.00	0.00	8.5	2413.08	0.00	0.00	9.4					
2413.05	0.00	0.00	10.2	2413.03	0.00	0.00	11.1	2412.93	0.00	-0.07	12.0					
2412.62	0.00	-0.21	12.5	2412.46	0.00	-0.21	13.3	2412.47	0.00	-0.03	14.0					
2412.24	0.00	0.04	15.0	2412.24	0.00	0.07	15.8	2412.24	0.00	0.10	16.7					
2412.24	0.00	0.14	17.5	2412.24	0.00	0.17	18.3	2412.24	0.00	0.20	19.2					
2412.24	0.00	0.24	20.0	2412.24	0.00	0.20	20.8	2412.24	0.00	0.17	21.7					
2412.24	0.00	0.14	22.5	2412.24	0.00	0.10	23.3	2412.24	0.00	0.07	24.2					
2412.24	0.00	0.04	25.0	2412.47	0.00	-0.03	26.0	2412.46	0.00	-0.21	26.7					
2412.62	0.00	-0.21	27.5	2412.93	0.00	-0.07	28.0	2413.03	0.00	0.00	28.9					
2413.06	0.00	0.00	29.7	2413.09	0.00	0.00	30.6	2413.11	0.00	0.00	31.4					
2413.14	0.00	0.00	32.3	2413.17	0.00	0.00	33.1	2413.20	0.00	0.00	34.0					

ID  
2 SECTION 2.00 TIME = 25.80 HRS WS =2411.93 WIDTH = 15.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2412.23	0.00	0.00	5.0	2412.18	0.00	0.00	5.9	2412.15	0.00	0.00	6.8					
2412.13	0.00	0.00	7.6	2412.10	0.00	0.00	8.5	2412.08	0.00	0.00	9.4					
2412.05	0.00	0.00	10.2	2412.03	0.00	0.00	11.1	2411.95	0.00	-0.05	12.0					
2411.63	0.00	-0.21	12.5	2411.40	0.00	-0.26	13.3	2411.40	0.00	-0.10	14.0					
2411.26	0.00	0.06	15.0	2411.26	0.00	0.09	15.8	2411.26	0.00	0.12	16.7					
2411.25	0.00	0.15	17.5	2411.25	0.00	0.19	18.3	2411.25	0.00	0.22	19.2					
2411.25	0.00	0.25	20.0	2411.25	0.00	0.22	20.8	2411.25	0.00	0.19	21.7					
2411.25	0.00	0.15	22.5	2411.26	0.00	0.12	23.3	2411.26	0.00	0.09	24.2					
2411.26	0.00	0.06	25.0	2411.40	0.00	-0.10	26.0	2411.40	0.00	-0.26	26.7					
2411.63	0.00	-0.21	27.5	2411.95	0.00	-0.05	28.0	2412.03	0.00	0.00	28.9					
2412.06	0.00	0.00	29.7	2412.09	0.00	0.00	30.6	2412.11	0.00	0.00	31.4					
2412.14	0.00	0.00	32.3	2412.17	0.00	0.00	33.1	2412.23	0.00	0.00	34.0					

ID  
1 SECTION 1.00 TIME = 25.80 HRS WS =2410.83 WIDTH = 15.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2411.20	0.00	0.00	5.0	2411.18	0.00	0.00	5.9	2411.15	0.00	0.00	6.8					
2411.13	0.00	0.00	7.6	2411.10	0.00	0.00	8.5	2411.08	0.00	0.00	9.4					
2411.05	0.00	0.00	10.2	2411.03	0.00	0.00	11.1	2411.00	0.00	0.00	12.0					
2410.73	0.00	-0.10	12.7	2410.33	0.00	-0.34	13.2	2410.16	0.00	-0.34	14.0					
2410.16	0.00	-0.04	15.0	2410.15	0.00	-0.01	15.8	2410.15	0.00	0.02	16.7					
2410.15	0.00	0.05	17.5	2410.15	0.00	0.09	18.3	2410.15	0.00	0.12	19.2					
2410.15	0.00	0.15	20.0	2410.15	0.00	0.12	20.8	2410.15	0.00	0.09	21.7					
2410.15	0.00	0.05	22.5	2410.15	0.00	0.02	23.3	2410.15	0.00	-0.01	24.2					
2410.16	0.00	-0.04	25.0	2410.16	0.00	-0.34	26.0	2410.33	0.00	-0.34	26.8					
2410.73	0.00	-0.10	27.3	2411.00	0.00	0.00	28.0	2411.03	0.00	0.00	28.9					

2411.06 0.00 0.00 29.7 2411.09 0.00 0.00 30.6 2411.11 0.00 0.00 31.4  
 2411.14 0.00 0.00 32.3 2411.17 0.00 0.00 33.1 2411.20 0.00 0.00 34.0

1

TIME = 30.01 HRS DT = 60 SECS TIME STEP = 1753

SECTION W.S.ELEV. WIDTH DEPTH Q V SLOPE D50 QS/Q FR SED. YIELD  
 FT FT FT CFS FPS MM 1000 PPM TONS

ID	SECTION	W.S.ELEV.	WIDTH	DEPTH	Q	V	SLOPE	D50	QS/Q	FR	SED. YIELD
		FT	FT	FT	CFS	FPS	MM	1000 PPM	TONS		
1.000	2410.83	15.2	0.68	40	4.27	0.010091	0.28	14.28	0.96	0.184E+04	
2.000	2411.93	15.9	0.68	40	4.22	0.010254	0.28	14.25	0.96	0.183E+04	
3.000	2412.93	16.0	0.69	40	4.21	0.010230	0.28	14.20	0.96	0.183E+04	
4.000	2413.93	17.2	0.69	40	4.13	0.010501	0.28	14.17	0.97	0.183E+04	
5.000	2414.93	16.0	0.70	40	4.21	0.010210	0.28	14.16	0.96	0.183E+04	
6.000	2415.93	17.1	0.69	40	4.14	0.010554	0.28	14.30	0.97	0.185E+04	
7.000	2416.93	15.8	0.71	40	4.23	0.010232	0.28	14.33	0.96	0.185E+04	
8.000	2417.83	16.5	0.71	40	4.20	0.010482	0.28	14.48	0.97	0.187E+04	
9.000	2419.33	27.9	0.66	40	3.32	0.009567	0.50	14.62	0.89	0.189E+04	
10.000	2419.83	14.7	0.72	40	4.34	0.010205	0.29	14.75	0.97	0.192E+04	
11.000	2421.23	27.6	0.73	40	3.34	0.009722	0.51	14.90	0.90	0.194E+04	
12.000	2422.03	17.2	0.75	40	4.19	0.011028	0.29	15.02	0.99	0.196E+04	
13.000	2422.93	15.4	0.93	40	3.93	0.007731	0.52	15.07	0.85	0.197E+04	

ID

12 SECTION 12.00 TIME = 30.01 HRS WS =2422.03 WIDTH = 17.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2422.23	0.00	0.00	5.0	2422.18	0.00	0.00	5.9	2422.15	0.00	0.00	6.8
2422.13	0.00	0.00	7.6	2422.10	0.00	0.00	8.5	2422.08	0.00	0.00	9.4
2422.05	0.00	0.00	10.2	2422.03	0.00	0.00	11.1	2422.01	0.00	0.01	12.0
2421.87	0.00	0.04	12.7	2421.73	0.00	0.06	13.3	2421.58	0.00	0.08	14.0
2421.31	0.00	0.11	15.0	2421.28	0.00	0.12	15.8	2421.28	0.00	0.15	16.7
2421.28	0.00	0.18	17.5	2421.28	0.00	0.21	18.3	2421.28	0.00	0.25	19.2
2421.28	0.00	0.28	20.0	2421.28	0.00	0.25	20.8	2421.28	0.00	0.21	21.7
2421.28	0.00	0.18	22.5	2421.28	0.00	0.15	23.3	2421.28	0.00	0.12	24.2
2421.31	0.00	0.11	25.0	2421.58	0.00	0.08	26.0	2421.73	0.00	0.06	26.7
2421.87	0.00	0.04	27.3	2422.01	0.00	0.01	28.0	2422.07	0.00	0.00	28.7
2422.13	0.00	0.00	29.3	2422.23	0.00	0.00	30.0				

ID

11 SECTION 11.00 TIME = 30.01 HRS WS =2421.23 WIDTH = 27.6

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2421.43	0.00	0.00	5.0	2421.18	0.00	0.00	5.9	2421.15	0.00	0.00	6.8
2421.13	0.00	0.01	7.6	2421.11	0.00	0.01	8.5	2421.08	0.00	0.01	9.4
2421.06	0.00	0.01	10.2	2421.04	0.00	0.01	11.1	2420.98	0.00	-0.02	12.0
2420.84	0.00	0.01	12.6	2420.75	0.00	0.08	13.3	2420.60	0.00	0.10	14.0
2420.50	0.00	0.30	15.0	2420.50	0.00	0.33	15.8	2420.50	0.00	0.36	16.7
2420.50	0.00	0.40	17.5	2420.50	0.00	0.43	18.3	2420.50	0.00	0.46	19.2
2420.50	0.00	0.50	20.0	2420.50	0.00	0.46	20.8	2420.50	0.00	0.43	21.7
2420.50	0.00	0.40	22.5	2420.50	0.00	0.36	23.3	2420.50	0.00	0.33	24.2
2420.50	0.00	0.30	25.0	2420.60	0.00	0.10	26.0	2420.75	0.00	0.08	26.7
2420.84	0.00	0.01	27.4	2421.04	0.00	0.04	28.0	2421.04	0.00	0.01	28.9
2421.07	0.00	0.01	29.7	2421.09	0.00	0.01	30.6	2421.13	0.00	0.02	31.4
2421.14	0.00	0.00	32.3	2421.17	0.00	0.00	33.1	2421.43	0.00	0.00	34.0

ID

10 SECTION 10.00 TIME = 30.01 HRS WS =2419.83 WIDTH = 14.7

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2420.20	0.00	0.00	5.0	2420.18	0.00	0.00	5.9	2420.15	0.00	0.00	6.8	
2420.13	0.00	0.00	7.6	2420.10	0.00	0.00	8.5	2420.08	0.00	0.00	9.4	
2420.05	0.00	0.00	10.2	2420.03	0.00	0.00	11.1	2420.00	0.00	0.00	12.0	
2419.82	0.00	-0.01	12.7	2419.45	0.00	-0.22	13.2	2419.39	0.00	-0.11	14.0	
2419.11	0.00	-0.09	15.0	2419.11	0.00	-0.06	15.8	2419.11	0.00	-0.03	16.7	
2419.11	0.00	0.01	17.5	2419.11	0.00	0.04	18.3	2419.11	0.00	0.08	19.2	
2419.11	0.00	0.11	20.0	2419.11	0.00	0.08	20.8	2419.11	0.00	0.04	21.7	
2419.11	0.00	0.01	22.5	2419.11	0.00	-0.02	23.3	2419.11	0.00	-0.06	24.2	
2419.11	0.00	-0.09	25.0	2419.39	0.00	-0.11	26.0	2419.45	0.00	-0.22	26.8	
2419.82	0.00	-0.01	27.3	2420.00	0.00	0.00	28.0	2420.03	0.00	0.00	28.9	
2420.06	0.00	0.00	29.7	2420.09	0.00	0.00	30.6	2420.11	0.00	0.00	31.4	
2420.14	0.00	0.00	32.3	2420.17	0.00	0.00	33.1	2420.20	0.00	0.00	34.0	

ID  
9 SECTION 9.00 TIME = 30.01 HRS WS =2419.33 WIDTH = 27.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2419.53	0.00	0.00	5.0	2419.19	0.00	0.02	5.9	2419.16	0.00	0.01	6.8	
2419.19	0.00	0.07	7.6	2419.15	0.00	0.05	8.5	2419.16	0.00	0.08	9.4	
2419.14	0.00	0.09	10.2	2419.10	0.00	0.08	11.1	2419.02	0.00	0.02	12.0	
2418.86	0.00	0.02	12.6	2418.74	0.00	0.07	13.3	2418.70	0.00	0.20	14.0	
2418.67	0.00	0.47	15.0	2418.67	0.00	0.50	15.8	2418.67	0.00	0.53	16.7	
2418.67	0.00	0.57	17.5	2418.67	0.00	0.60	18.3	2418.67	0.00	0.63	19.2	
2418.67	0.00	0.67	20.0	2418.67	0.00	0.63	20.8	2418.67	0.00	0.60	21.7	
2418.67	0.00	0.57	22.5	2418.67	0.00	0.53	23.3	2418.67	0.00	0.50	24.2	
2418.67	0.00	0.47	25.0	2418.70	0.00	0.20	26.0	2418.74	0.00	0.07	26.7	
2418.86	0.00	0.02	27.4	2419.02	0.00	0.02	28.0	2419.10	0.00	0.08	28.9	
2419.15	0.00	0.09	29.7	2419.14	0.00	0.06	30.6	2419.19	0.00	0.08	31.4	
2419.21	0.00	0.06	32.3	2419.25	0.00	0.08	33.1	2419.53	0.00	0.00	34.0	

ID  
8 SECTION 8.00 TIME = 30.01 HRS WS =2417.83 WIDTH = 16.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2418.20	0.00	0.00	5.0	2418.18	0.00	0.00	5.9	2418.15	0.00	0.00	6.8	
2418.13	0.00	0.00	7.6	2418.10	0.00	0.00	8.5	2418.08	0.00	0.00	9.4	
2418.05	0.00	0.00	10.2	2418.03	0.00	0.00	11.1	2417.78	0.00	-0.22	11.9	
2417.56	0.00	-0.27	12.4	2417.46	0.00	-0.21	13.3	2417.36	0.00	-0.14	14.0	
2417.12	0.00	-0.08	15.0	2417.12	0.00	-0.04	15.8	2417.12	0.00	-0.01	16.7	
2417.12	0.00	0.02	17.5	2417.12	0.00	0.06	18.3	2417.12	0.00	0.09	19.2	
2417.12	0.00	0.12	20.0	2417.12	0.00	0.09	20.8	2417.12	0.00	0.06	21.7	
2417.12	0.00	0.02	22.5	2417.12	0.00	-0.01	23.3	2417.12	0.00	-0.04	24.2	
2417.12	0.00	-0.08	25.0	2417.36	0.00	-0.14	26.0	2417.46	0.00	-0.21	26.7	
2417.56	0.00	-0.28	27.6	2417.78	0.00	-0.22	28.1	2418.03	0.00	0.00	28.9	
2418.06	0.00	0.00	29.7	2418.09	0.00	0.00	30.6	2418.11	0.00	0.00	31.4	
2418.14	0.00	0.00	32.3	2418.17	0.00	0.00	33.1	2418.20	0.00	0.00	34.0	

ID  
7 SECTION 7.00 TIME = 30.01 HRS WS =2416.93 WIDTH = 15.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2417.20	0.00	0.00	5.0	2417.18	0.00	0.00	5.9	2417.15	0.00	0.00	6.8	
2417.13	0.00	0.00	7.6	2417.10	0.00	0.00	8.5	2417.08	0.00	0.00	9.4	
2417.05	0.00	0.00	10.2	2417.03	0.00	0.00	11.1	2416.96	0.00	-0.04	12.0	
2416.79	0.00	-0.04	12.6	2416.50	0.00	-0.17	13.4	2416.42	0.00	-0.08	14.0	
2416.22	0.00	0.02	15.0	2416.22	0.00	0.05	15.8	2416.22	0.00	0.08	16.7	
2416.22	0.00	0.12	17.5	2416.22	0.00	0.15	18.3	2416.22	0.00	0.18	19.2	
2416.22	0.00	0.22	20.0	2416.22	0.00	0.18	20.8	2416.22	0.00	0.15	21.7	
2416.22	0.00	0.12	22.5	2416.22	0.00	0.08	23.3	2416.22	0.00	0.05	24.2	

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2416.22	0.00	0.02	25.0	2416.42	0.00	-0.08	26.0	2416.50	0.00	-0.17	26.6
2416.79	0.00	-0.04	27.4	2416.96	0.00	-0.04	28.0	2417.03	0.00	0.00	28.9
2417.06	0.00	0.00	29.7	2417.09	0.00	0.00	30.6	2417.11	0.00	0.00	31.4
2417.14	0.00	0.00	32.3	2417.17	0.00	0.00	33.1	2417.20	0.00	0.00	34.0

ID  
6 SECTION 6.00 TIME = 30.01 HRS WS =2415.93 WIDTH = 17.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2416.20	0.00	0.00	5.0	2416.18	0.00	0.00	5.9	2416.15	0.00	0.00	6.8
2416.13	0.00	0.00	7.6	2416.10	0.00	0.00	8.5	2416.08	0.00	0.00	9.4
2416.05	0.00	0.00	10.2	2416.03	0.00	0.00	11.1	2415.78	0.00	-0.22	11.9
2415.58	0.00	-0.25	12.4	2415.44	0.00	-0.22	13.4	2415.49	0.00	-0.01	14.0
2415.25	0.00	0.05	15.0	2415.25	0.00	0.08	15.8	2415.24	0.00	0.11	16.7
2415.24	0.00	0.14	17.5	2415.24	0.00	0.18	18.3	2415.24	0.00	0.21	19.2
2415.24	0.00	0.24	20.0	2415.24	0.00	0.21	20.8	2415.24	0.00	0.18	21.7
2415.24	0.00	0.14	22.5	2415.24	0.00	0.11	23.3	2415.25	0.00	0.08	24.2
2415.25	0.00	0.05	25.0	2415.49	0.00	-0.01	26.0	2415.44	0.00	-0.22	26.6
2415.58	0.00	-0.25	27.6	2415.78	0.00	-0.22	28.1	2416.03	0.00	0.00	28.9
2416.06	0.00	0.00	29.7	2416.09	0.00	0.00	30.6	2416.11	0.00	0.00	31.4
2416.14	0.00	0.00	32.3	2416.17	0.00	0.00	33.1	2416.20	0.00	0.00	34.0

ID  
5 SECTION 5.00 TIME = 30.01 HRS WS =2414.93 WIDTH = 16.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2415.20	0.00	0.00	5.0	2415.18	0.00	0.00	5.9	2415.15	0.00	0.00	6.8
2415.13	0.00	0.00	7.6	2415.10	0.00	0.00	8.5	2415.08	0.00	0.00	9.4
2415.05	0.00	0.00	10.2	2415.03	0.00	0.00	11.1	2414.93	0.00	-0.07	12.0
2414.65	0.00	-0.18	12.5	2414.52	0.00	-0.15	13.3	2414.45	0.00	-0.05	14.0
2414.23	0.00	0.03	15.0	2414.23	0.00	0.06	15.8	2414.23	0.00	0.09	16.7
2414.23	0.00	0.13	17.5	2414.23	0.00	0.16	18.3	2414.23	0.00	0.19	19.2
2414.23	0.00	0.23	20.0	2414.23	0.00	0.19	20.8	2414.23	0.00	0.16	21.7
2414.23	0.00	0.13	22.5	2414.23	0.00	0.09	23.3	2414.23	0.00	0.06	24.2
2414.23	0.00	0.03	25.0	2414.45	0.00	-0.05	26.0	2414.52	0.00	-0.15	26.7
2414.65	0.00	-0.18	27.5	2414.93	0.00	-0.07	28.0	2415.03	0.00	0.00	28.9
2415.06	0.00	0.00	29.7	2415.09	0.00	0.00	30.6	2415.11	0.00	0.00	31.4
2415.14	0.00	0.00	32.3	2415.17	0.00	0.00	33.1	2415.20	0.00	0.00	34.0

ID  
4 SECTION 4.00 TIME = 30.01 HRS WS =2413.93 WIDTH = 17.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2414.20	0.00	0.00	5.0	2414.18	0.00	0.00	5.9	2414.15	0.00	0.00	6.8
2414.13	0.00	0.00	7.6	2414.10	0.00	0.00	8.5	2414.08	0.00	0.00	9.4
2414.05	0.00	0.00	10.2	2414.03	0.00	0.00	11.1	2413.76	0.00	-0.24	11.9
2413.56	0.00	-0.27	12.5	2413.41	0.00	-0.26	13.3	2413.47	0.00	-0.03	14.0
2413.26	0.00	0.06	15.0	2413.26	0.00	0.09	15.8	2413.26	0.00	0.12	16.7
2413.25	0.00	0.15	17.5	2413.25	0.00	0.18	18.3	2413.24	0.00	0.21	19.2
2413.24	0.00	0.24	20.0	2413.24	0.00	0.21	20.8	2413.25	0.00	0.18	21.7
2413.25	0.00	0.15	22.5	2413.26	0.00	0.12	23.3	2413.26	0.00	0.09	24.2
2413.26	0.00	0.06	25.0	2413.47	0.00	-0.03	26.0	2413.41	0.00	-0.26	26.7
2413.56	0.00	-0.27	27.5	2413.76	0.00	-0.24	28.1	2414.03	0.00	0.00	28.9
2414.06	0.00	0.00	29.7	2414.09	0.00	0.00	30.6	2414.11	0.00	0.00	31.4
2414.14	0.00	0.00	32.3	2414.17	0.00	0.00	33.1	2414.20	0.00	0.00	34.0

ID  
3 SECTION 3.00 TIME = 30.01 HRS WS =2412.93 WIDTH = 16.0

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2413.20	0.00	0.00	5.0	2413.18	0.00	0.00	5.9	2413.15	0.00	0.00	6.8
2413.13	0.00	0.00	7.6	2413.10	0.00	0.00	8.5	2413.08	0.00	0.00	9.4
2413.05	0.00	0.00	10.2	2413.03	0.00	0.00	11.1	2412.93	0.00	-0.07	12.0
2412.62	0.00	-0.21	12.5	2412.46	0.00	-0.21	13.3	2412.47	0.00	-0.03	14.0
2412.24	0.00	0.04	15.0	2412.24	0.00	0.07	15.8	2412.24	0.00	0.10	16.7
2412.24	0.00	0.14	17.5	2412.24	0.00	0.17	18.3	2412.24	0.00	0.20	19.2
2412.24	0.00	0.24	20.0	2412.24	0.00	0.20	20.8	2412.24	0.00	0.17	21.7
2412.24	0.00	0.14	22.5	2412.24	0.00	0.10	23.3	2412.24	0.00	0.07	24.2
2412.24	0.00	0.04	25.0	2412.47	0.00	-0.03	26.0	2412.46	0.00	-0.21	26.7
2412.62	0.00	-0.21	27.5	2412.93	0.00	-0.07	28.0	2413.03	0.00	0.00	28.9
2413.06	0.00	0.00	29.7	2413.09	0.00	0.00	30.6	2413.11	0.00	0.00	31.4
2413.14	0.00	0.00	32.3	2413.17	0.00	0.00	33.1	2413.20	0.00	0.00	34.0

ID  
2 SECTION 2.00 TIME = 30.01 HRS WS =2411.93 WIDTH = 15.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2412.23	0.00	0.00	5.0	2412.18	0.00	0.00	5.9	2412.15	0.00	0.00	6.8
2412.13	0.00	0.00	7.6	2412.10	0.00	0.00	8.5	2412.08	0.00	0.00	9.4
2412.05	0.00	0.00	10.2	2412.03	0.00	0.00	11.1	2411.95	0.00	-0.05	12.0
2411.63	0.00	-0.21	12.5	2411.40	0.00	-0.26	13.3	2411.40	0.00	-0.10	14.0
2411.26	0.00	0.06	15.0	2411.26	0.00	0.09	15.8	2411.26	0.00	0.12	16.7
2411.25	0.00	0.15	17.5	2411.25	0.00	0.19	18.3	2411.25	0.00	0.22	19.2
2411.25	0.00	0.25	20.0	2411.25	0.00	0.22	20.8	2411.25	0.00	0.19	21.7
2411.25	0.00	0.15	22.5	2411.26	0.00	0.12	23.3	2411.26	0.00	0.09	24.2
2411.26	0.00	0.06	25.0	2411.40	0.00	-0.10	26.0	2411.40	0.00	-0.26	26.7
2411.63	0.00	-0.21	27.5	2411.95	0.00	-0.05	28.0	2412.03	0.00	0.00	28.9
2412.06	0.00	0.00	29.7	2412.09	0.00	0.00	30.6	2412.11	0.00	0.00	31.4
2412.14	0.00	0.00	32.3	2412.17	0.00	0.00	33.1	2412.23	0.00	0.00	34.0

ID  
1 SECTION 1.00 TIME = 30.01 HRS WS =2410.83 WIDTH = 15.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2411.20	0.00	0.00	5.0	2411.18	0.00	0.00	5.9	2411.15	0.00	0.00	6.8
2411.13	0.00	0.00	7.6	2411.10	0.00	0.00	8.5	2411.08	0.00	0.00	9.4
2411.05	0.00	0.00	10.2	2411.03	0.00	0.00	11.1	2411.00	0.00	0.00	12.0
2410.73	0.00	-0.10	12.7	2410.33	0.00	-0.34	13.2	2410.16	0.00	-0.34	14.0
2410.16	0.00	-0.04	15.0	2410.15	0.00	-0.01	15.8	2410.15	0.00	0.02	16.7
2410.15	0.00	0.05	17.5	2410.15	0.00	0.09	18.3	2410.15	0.00	0.12	19.2
2410.15	0.00	0.15	20.0	2410.15	0.00	0.12	20.8	2410.15	0.00	0.09	21.7
2410.15	0.00	0.05	22.5	2410.15	0.00	0.02	23.3	2410.15	0.00	-0.01	24.2
2410.16	0.00	-0.04	25.0	2410.16	0.00	-0.34	26.0	2410.33	0.00	-0.34	26.8
2410.73	0.00	-0.10	27.3	2411.00	0.00	0.00	28.0	2411.03	0.00	0.00	28.9
2411.06	0.00	0.00	29.7	2411.09	0.00	0.00	30.6	2411.11	0.00	0.00	31.4
2411.14	0.00	0.00	32.3	2411.17	0.00	0.00	33.1	2411.20	0.00	0.00	34.0

1  
TIME = 30.80 HRS DT = 60 SECS TIME STEP = 1800

SECTION W.S.ELEV. WIDTH DEPTH Q V SLOPE D50 QS/Q FR SED. YIELD  
FT FT FT CFS FPS MM 1000 PPM TONS

1.000	2410.83	15.2	0.68	40	4.27	0.010091	0.28	14.28	0.96	0.189E+04
2.000	2411.93	15.9	0.68	40	4.22	0.010254	0.28	14.25	0.96	0.188E+04
3.000	2412.93	16.0	0.69	40	4.21	0.010230	0.28	14.20	0.96	0.188E+04
4.000	2413.93	17.2	0.69	40	4.13	0.010501	0.28	14.17	0.97	0.188E+04
5.000	2414.93	16.0	0.70	40	4.21	0.010210	0.28	14.16	0.96	0.188E+04
6.000	2415.93	17.1	0.69	40	4.14	0.010554	0.28	14.30	0.97	0.190E+04

7.000	2416.93	15.8	0.71	40	4.23	0.010232	0.28	14.33	0.96	0.190E+04		
8.000	2417.83	16.5	0.71	40	4.20	0.010482	0.28	14.48	0.97	0.192E+04		
9.000	2419.33	27.9	0.66	40	3.32	0.009567	0.50	14.62	0.89	0.194E+04		
10.000	2419.83	14.7	0.72	40	4.34	0.010205	0.29	14.75	0.97	0.197E+04		
11.000	2421.23	27.6	0.73	40	3.34	0.009722	0.51	14.90	0.90	0.199E+04		
12.000	2422.03	17.2	0.75	40	4.19	0.011028	0.29	15.02	0.99	0.201E+04		
13.000	2422.93	15.4	0.93	40	3.93	0.007731	0.52	15.07	0.85	0.202E+04		

## ID

12 SECTION 12.00 TIME = 30.80 HRS WS =2422.03 WIDTH = 17.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2422.23	0.00	0.00	5.0	2422.18	0.00	0.00	5.9	2422.15	0.00	0.00	6.8
2422.13	0.00	0.00	7.6	2422.10	0.00	0.00	8.5	2422.08	0.00	0.00	9.4
2422.05	0.00	0.00	10.2	2422.03	0.00	0.00	11.1	2422.01	0.00	0.01	12.0
2421.87	0.00	0.04	12.7	2421.73	0.00	0.06	13.3	2421.58	0.00	0.08	14.0
2421.31	0.00	0.11	15.0	2421.28	0.00	0.12	15.8	2421.28	0.00	0.15	16.7
2421.28	0.00	0.18	17.5	2421.28	0.00	0.21	18.3	2421.28	0.00	0.25	19.2
2421.28	0.00	0.28	20.0	2421.28	0.00	0.25	20.8	2421.28	0.00	0.21	21.7
2421.28	0.00	0.18	22.5	2421.28	0.00	0.15	23.3	2421.28	0.00	0.12	24.2
2421.31	0.00	0.11	25.0	2421.58	0.00	0.08	26.0	2421.73	0.00	0.06	26.7
2421.87	0.00	0.04	27.3	2422.01	0.00	0.01	28.0	2422.07	0.00	0.00	28.7
2422.13	0.00	0.00	29.3	2422.23	0.00	0.00	30.0				

## ID

11 SECTION 11.00 TIME = 30.80 HRS WS =2421.23 WIDTH = 27.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2421.43	0.00	0.00	5.0	2421.18	0.00	0.00	5.9	2421.15	0.00	0.00	6.8
2421.13	0.00	0.01	7.6	2421.11	0.00	0.01	8.5	2421.08	0.00	0.01	9.4
2421.06	0.00	0.01	10.2	2421.04	0.00	0.01	11.1	2420.98	0.00	-0.02	12.0
2420.84	0.00	0.01	12.6	2420.75	0.00	0.08	13.3	2420.60	0.00	0.10	14.0
2420.50	0.00	0.30	15.0	2420.50	0.00	0.33	15.8	2420.50	0.00	0.36	16.7
2420.50	0.00	0.40	17.5	2420.50	0.00	0.43	18.3	2420.50	0.00	0.46	19.2
2420.50	0.00	0.50	20.0	2420.50	0.00	0.46	20.8	2420.50	0.00	0.43	21.7
2420.50	0.00	0.40	22.5	2420.50	0.00	0.36	23.3	2420.50	0.00	0.33	24.2
2420.50	0.00	0.30	25.0	2420.60	0.00	0.10	26.0	2420.75	0.00	0.08	26.7
2420.84	0.00	0.01	27.4	2421.04	0.00	0.04	28.0	2421.04	0.00	0.01	28.9
2421.07	0.00	0.01	29.7	2421.09	0.00	0.01	30.6	2421.13	0.00	0.02	31.4
2421.14	0.00	0.00	32.3	2421.17	0.00	0.00	33.1	2421.43	0.00	0.00	34.0

## ID

10 SECTION 10.00 TIME = 30.80 HRS WS =2419.83 WIDTH = 14.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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2420.20	0.00	0.00	5.0	2420.18	0.00	0.00	5.9	2420.15	0.00	0.00	6.8
2420.13	0.00	0.00	7.6	2420.10	0.00	0.00	8.5	2420.08	0.00	0.00	9.4
2420.05	0.00	0.00	10.2	2420.03	0.00	0.00	11.1	2420.00	0.00	0.00	12.0
2419.82	0.00	-0.01	12.7	2419.45	0.00	-0.22	13.2	2419.39	0.00	-0.11	14.0
2419.11	0.00	-0.09	15.0	2419.11	0.00	-0.06	15.8	2419.11	0.00	-0.03	16.7
2419.11	0.00	0.01	17.5	2419.11	0.00	0.04	18.3	2419.11	0.00	0.08	19.2
2419.11	0.00	0.11	20.0	2419.11	0.00	0.08	20.8	2419.11	0.00	0.04	21.7
2419.11	0.00	0.01	22.5	2419.11	0.00	-0.02	23.3	2419.11	0.00	-0.06	24.2
2419.11	0.00	-0.09	25.0	2419.39	0.00	-0.11	26.0	2419.45	0.00	-0.22	26.8
2419.82	0.00	-0.01	27.3	2420.00	0.00	0.00	28.0	2420.03	0.00	0.00	28.9
2420.06	0.00	0.00	29.7	2420.09	0.00	0.00	30.6	2420.11	0.00	0.00	31.4
2420.14	0.00	0.00	32.3	2420.17	0.00	0.00	33.1	2420.20	0.00	0.00	34.0

## ID

9 SECTION 9.00 TIME = 30.80 HRS WS =2419.33 WIDTH = 27.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2419.53	0.00	0.00	5.0	2419.19	0.00	0.02	5.9	2419.16	0.00	0.01	6.8
2419.19	0.00	0.07	7.6	2419.15	0.00	0.05	8.5	2419.16	0.00	0.08	9.4
2419.14	0.00	0.09	10.2	2419.10	0.00	0.08	11.1	2419.02	0.00	0.02	12.0
2418.86	0.00	0.02	12.6	2418.74	0.00	0.07	13.3	2418.70	0.00	0.20	14.0
2418.67	0.00	0.47	15.0	2418.67	0.00	0.50	15.8	2418.67	0.00	0.53	16.7
2418.67	0.00	0.57	17.5	2418.67	0.00	0.60	18.3	2418.67	0.00	0.63	19.2
2418.67	0.00	0.67	20.0	2418.67	0.00	0.63	20.8	2418.67	0.00	0.60	21.7
2418.67	0.00	0.57	22.5	2418.67	0.00	0.53	23.3	2418.67	0.00	0.50	24.2
2418.67	0.00	0.47	25.0	2418.70	0.00	0.20	26.0	2418.74	0.00	0.07	26.7
2418.86	0.00	0.02	27.4	2419.02	0.00	0.02	28.0	2419.10	0.00	0.08	28.9
2419.15	0.00	0.09	29.7	2419.14	0.00	0.06	30.6	2419.19	0.00	0.08	31.4
2419.21	0.00	0.06	32.3	2419.25	0.00	0.08	33.1	2419.53	0.00	0.00	34.0

ID

8 SECTION 8.00 TIME = 30.80 HRS WS =2417.83 WIDTH = 16.5

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2418.20	0.00	0.00	5.0	2418.18	0.00	0.00	5.9	2418.15	0.00	0.00	6.8
2418.13	0.00	0.00	7.6	2418.10	0.00	0.00	8.5	2418.08	0.00	0.00	9.4
2418.05	0.00	0.00	10.2	2418.03	0.00	0.00	11.1	2417.78	0.00	-0.22	11.9
2417.56	0.00	-0.27	12.4	2417.46	0.00	-0.21	13.3	2417.36	0.00	-0.14	14.0
2417.12	0.00	-0.08	15.0	2417.12	0.00	-0.04	15.8	2417.12	0.00	-0.01	16.7
2417.12	0.00	0.02	17.5	2417.12	0.00	0.06	18.3	2417.12	0.00	0.09	19.2
2417.12	0.00	0.12	20.0	2417.12	0.00	0.09	20.8	2417.12	0.00	0.06	21.7
2417.12	0.00	0.02	22.5	2417.12	0.00	-0.01	23.3	2417.12	0.00	-0.04	24.2
2417.12	0.00	-0.08	25.0	2417.36	0.00	-0.14	26.0	2417.46	0.00	-0.21	26.7
2417.56	0.00	-0.28	27.6	2417.78	0.00	-0.22	28.1	2418.03	0.00	0.00	28.9
2418.06	0.00	0.00	29.7	2418.09	0.00	0.00	30.6	2418.11	0.00	0.00	31.4
2418.14	0.00	0.00	32.3	2418.17	0.00	0.00	33.1	2418.20	0.00	0.00	34.0

ID

7 SECTION 7.00 TIME = 30.80 HRS WS =2416.93 WIDTH = 15.8

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2417.20	0.00	0.00	5.0	2417.18	0.00	0.00	5.9	2417.15	0.00	0.00	6.8
2417.13	0.00	0.00	7.6	2417.10	0.00	0.00	8.5	2417.08	0.00	0.00	9.4
2417.05	0.00	0.00	10.2	2417.03	0.00	0.00	11.1	2416.96	0.00	-0.04	12.0
2416.79	0.00	-0.04	12.6	2416.50	0.00	-0.17	13.4	2416.42	0.00	-0.08	14.0
2416.22	0.00	0.02	15.0	2416.22	0.00	0.05	15.8	2416.22	0.00	0.08	16.7
2416.22	0.00	0.12	17.5	2416.22	0.00	0.15	18.3	2416.22	0.00	0.18	19.2
2416.22	0.00	0.22	20.0	2416.22	0.00	0.18	20.8	2416.22	0.00	0.15	21.7
2416.22	0.00	0.12	22.5	2416.22	0.00	0.08	23.3	2416.22	0.00	0.05	24.2
2416.22	0.00	0.02	25.0	2416.42	0.00	-0.08	26.0	2416.50	0.00	-0.17	26.6
2416.79	0.00	-0.04	27.4	2416.96	0.00	-0.04	28.0	2417.03	0.00	0.00	28.9
2417.06	0.00	0.00	29.7	2417.09	0.00	0.00	30.6	2417.11	0.00	0.00	31.4
2417.14	0.00	0.00	32.3	2417.17	0.00	0.00	33.1	2417.20	0.00	0.00	34.0

ID

6 SECTION 6.00 TIME = 30.80 HRS WS =2415.93 WIDTH = 17.1

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

2416.20	0.00	0.00	5.0	2416.18	0.00	0.00	5.9	2416.15	0.00	0.00	6.8
2416.13	0.00	0.00	7.6	2416.10	0.00	0.00	8.5	2416.08	0.00	0.00	9.4
2416.05	0.00	0.00	10.2	2416.03	0.00	0.00	11.1	2415.78	0.00	-0.22	11.9
2415.58	0.00	-0.25	12.4	2415.44	0.00	-0.22	13.4	2415.49	0.00	-0.01	14.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2415.25	0.00	0.05	15.0	2415.25	0.00	0.08	15.8	2415.24	0.00	0.11	16.7	
2415.24	0.00	0.14	17.5	2415.24	0.00	0.18	18.3	2415.24	0.00	0.21	19.2	
2415.24	0.00	0.24	20.0	2415.24	0.00	0.21	20.8	2415.24	0.00	0.18	21.7	
2415.24	0.00	0.14	22.5	2415.24	0.00	0.11	23.3	2415.25	0.00	0.08	24.2	
2415.25	0.00	0.05	25.0	2415.49	0.00	-0.01	26.0	2415.44	0.00	-0.22	26.6	
2415.58	0.00	-0.25	27.6	2415.78	0.00	-0.22	28.1	2416.03	0.00	0.00	28.9	
2416.06	0.00	0.00	29.7	2416.09	0.00	0.00	30.6	2416.11	0.00	0.00	31.4	
2416.14	0.00	0.00	32.3	2416.17	0.00	0.00	33.1	2416.20	0.00	0.00	34.0	

ID  
5 SECTION 5.00 TIME = 30.80 HRS WS =2414.93 WIDTH = 16.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2415.20	0.00	0.00	5.0	2415.18	0.00	0.00	5.9	2415.15	0.00	0.00	6.8	
2415.13	0.00	0.00	7.6	2415.10	0.00	0.00	8.5	2415.08	0.00	0.00	9.4	
2415.05	0.00	0.00	10.2	2415.03	0.00	0.00	11.1	2414.93	0.00	-0.07	12.0	
2414.65	0.00	-0.18	12.5	2414.52	0.00	-0.15	13.3	2414.45	0.00	-0.05	14.0	
2414.23	0.00	0.03	15.0	2414.23	0.00	0.06	15.8	2414.23	0.00	0.09	16.7	
2414.23	0.00	0.13	17.5	2414.23	0.00	0.16	18.3	2414.23	0.00	0.19	19.2	
2414.23	0.00	0.23	20.0	2414.23	0.00	0.19	20.8	2414.23	0.00	0.16	21.7	
2414.23	0.00	0.13	22.5	2414.23	0.00	0.09	23.3	2414.23	0.00	0.06	24.2	
2414.23	0.00	0.03	25.0	2414.45	0.00	-0.05	26.0	2414.52	0.00	-0.15	26.7	
2414.65	0.00	-0.18	27.5	2414.93	0.00	-0.07	28.0	2415.03	0.00	0.00	28.9	
2415.06	0.00	0.00	29.7	2415.09	0.00	0.00	30.6	2415.11	0.00	0.00	31.4	
2415.14	0.00	0.00	32.3	2415.17	0.00	0.00	33.1	2415.20	0.00	0.00	34.0	

ID  
4 SECTION 4.00 TIME = 30.80 HRS WS =2413.93 WIDTH = 17.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2414.20	0.00	0.00	5.0	2414.18	0.00	0.00	5.9	2414.15	0.00	0.00	6.8	
2414.13	0.00	0.00	7.6	2414.10	0.00	0.00	8.5	2414.08	0.00	0.00	9.4	
2414.05	0.00	0.00	10.2	2414.03	0.00	0.00	11.1	2413.76	0.00	-0.24	11.9	
2413.56	0.00	-0.27	12.5	2413.41	0.00	-0.26	13.3	2413.47	0.00	-0.03	14.0	
2413.26	0.00	0.06	15.0	2413.26	0.00	0.09	15.8	2413.26	0.00	0.12	16.7	
2413.25	0.00	0.15	17.5	2413.25	0.00	0.18	18.3	2413.24	0.00	0.21	19.2	
2413.24	0.00	0.24	20.0	2413.24	0.00	0.21	20.8	2413.25	0.00	0.18	21.7	
2413.25	0.00	0.15	22.5	2413.26	0.00	0.12	23.3	2413.26	0.00	0.09	24.2	
2413.26	0.00	0.06	25.0	2413.47	0.00	-0.03	26.0	2413.41	0.00	-0.26	26.7	
2413.56	0.00	-0.27	27.5	2413.76	0.00	-0.24	28.1	2414.03	0.00	0.00	28.9	
2414.06	0.00	0.00	29.7	2414.09	0.00	0.00	30.6	2414.11	0.00	0.00	31.4	
2414.14	0.00	0.00	32.3	2414.17	0.00	0.00	33.1	2414.20	0.00	0.00	34.0	

ID  
3 SECTION 3.00 TIME = 30.80 HRS WS =2412.93 WIDTH = 16.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
2413.20	0.00	0.00	5.0	2413.18	0.00	0.00	5.9	2413.15	0.00	0.00	6.8	
2413.13	0.00	0.00	7.6	2413.10	0.00	0.00	8.5	2413.08	0.00	0.00	9.4	
2413.05	0.00	0.00	10.2	2413.03	0.00	0.00	11.1	2412.93	0.00	-0.07	12.0	
2412.62	0.00	-0.21	12.5	2412.46	0.00	-0.21	13.3	2412.47	0.00	-0.03	14.0	
2412.24	0.00	0.04	15.0	2412.24	0.00	0.07	15.8	2412.24	0.00	0.10	16.7	
2412.24	0.00	0.14	17.5	2412.24	0.00	0.17	18.3	2412.24	0.00	0.20	19.2	
2412.24	0.00	0.24	20.0	2412.24	0.00	0.20	20.8	2412.24	0.00	0.17	21.7	
2412.24	0.00	0.14	22.5	2412.24	0.00	0.10	23.3	2412.24	0.00	0.07	24.2	
2412.24	0.00	0.04	25.0	2412.47	0.00	-0.03	26.0	2412.46	0.00	-0.21	26.7	
2412.62	0.00	-0.21	27.5	2412.93	0.00	-0.07	28.0	2413.03	0.00	0.00	28.9	
2413.06	0.00	0.00	29.7	2413.09	0.00	0.00	30.6	2413.11	0.00	0.00	31.4	
2413.14	0.00	0.00	32.3	2413.17	0.00	0.00	33.1	2413.20	0.00	0.00	34.0	

ID  
2 SECTION 2.00 TIME = 30.80 HRS WS =2411.93 WIDTH = 15.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2412.23	0.00	0.00	5.0	2412.18	0.00	0.00	5.9	2412.15	0.00	0.00	6.8
2412.13	0.00	0.00	7.6	2412.10	0.00	0.00	8.5	2412.08	0.00	0.00	9.4
2412.05	0.00	0.00	10.2	2412.03	0.00	0.00	11.1	2411.95	0.00	-0.05	12.0
2411.63	0.00	-0.21	12.5	2411.40	0.00	-0.26	13.3	2411.40	0.00	-0.10	14.0
2411.26	0.00	0.06	15.0	2411.26	0.00	0.09	15.8	2411.26	0.00	0.12	16.7
2411.25	0.00	0.15	17.5	2411.25	0.00	0.19	18.3	2411.25	0.00	0.22	19.2
2411.25	0.00	0.25	20.0	2411.25	0.00	0.22	20.8	2411.25	0.00	0.19	21.7
2411.25	0.00	0.15	22.5	2411.26	0.00	0.12	23.3	2411.26	0.00	0.09	24.2
2411.26	0.00	0.06	25.0	2411.40	0.00	-0.10	26.0	2411.40	0.00	-0.26	26.7
2411.63	0.00	-0.21	27.5	2411.95	0.00	-0.05	28.0	2412.03	0.00	0.00	28.9
2412.06	0.00	0.00	29.7	2412.09	0.00	0.00	30.6	2412.11	0.00	0.00	31.4
2412.14	0.00	0.00	32.3	2412.17	0.00	0.00	33.1	2412.23	0.00	0.00	34.0

ID  
1 SECTION 1.00 TIME = 30.80 HRS WS =2410.83 WIDTH = 15.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
2411.20	0.00	0.00	5.0	2411.18	0.00	0.00	5.9	2411.15	0.00	0.00	6.8
2411.13	0.00	0.00	7.6	2411.10	0.00	0.00	8.5	2411.08	0.00	0.00	9.4
2411.05	0.00	0.00	10.2	2411.03	0.00	0.00	11.1	2411.00	0.00	0.00	12.0
2410.73	0.00	-0.10	12.7	2410.33	0.00	-0.34	13.2	2410.16	0.00	-0.34	14.0
2410.16	0.00	-0.04	15.0	2410.15	0.00	-0.01	15.8	2410.15	0.00	0.02	16.7
2410.15	0.00	0.05	17.5	2410.15	0.00	0.09	18.3	2410.15	0.00	0.12	19.2
2410.15	0.00	0.15	20.0	2410.15	0.00	0.12	20.8	2410.15	0.00	0.09	21.7
2410.15	0.00	0.05	22.5	2410.15	0.00	0.02	23.3	2410.15	0.00	-0.01	24.2
2410.16	0.00	-0.04	25.0	2410.16	0.00	-0.34	26.0	2410.33	0.00	-0.34	26.8
2410.73	0.00	-0.10	27.3	2411.00	0.00	0.00	28.0	2411.03	0.00	0.00	28.9
2411.06	0.00	0.00	29.7	2411.09	0.00	0.00	30.6	2411.11	0.00	0.00	31.4
2411.14	0.00	0.00	32.3	2411.17	0.00	0.00	33.1	2411.20	0.00	0.00	34.0

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\* FLUVIAL-12 SIMULATION OF RIVER HYDRAULICS, \*
\* SEDIMENT TRANSPORT AND RIVER CHANNEL CHANGES \*
\* FOR USE BY HOWARD H. CHANG \*
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T1 CALICO SITE, BASIN 20B

T2

T3

G1	4.00	31.00	120.00	3.00	0.50	0.00	0.03	17.00	30.00	1250.00
G2	78.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G2	0.00	0.00	75.00	5.00	257.00	10.00	824.00	15.00	1071.00	16.80
G2	1071.00	17.10	1011.00	20.00	514.00	25.00	129.00	30.00	0.00	37.00
G3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G4	10000.00	0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00
G5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.00
GQ	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
GQ	1863.60	5.00	1864.50	475.00	1864.60	700.00	1864.80	1075.00		
GS	0.13	0.14	0.26	0.20	0.45	0.20	0.73	0.20	2.20	0.26
X1	1.00	133.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
X3					19.00					
GR	1866.90	0.00	1866.80	10.50	1866.70	21.00	1866.60	27.00	1866.50	37.00
GR	1866.25	52.00	1866.00	67.00	1866.20	77.00	1866.10	80.00	1866.10	82.00
GR	1866.10	83.00	1866.20	88.00	1866.13	102.00	1866.07	116.00	1866.00	130.00
GR	1866.15	143.00	1866.30	156.00	1866.15	172.00	1866.00	188.00	1866.00	204.00
GR	1866.00	220.00	1866.10	222.00	1866.10	225.00	1866.10	226.00	1866.10	232.00
GR	1866.10	234.00	1866.00	250.00	1866.00	254.00	1866.00	255.00	1866.00	258.00
GR	1865.90	263.00	1865.90	266.00	1865.90	267.00	1865.80	269.00	1865.80	270.00
GR	1865.80	271.00	1865.80	272.00	1865.80	273.00	1865.80	274.00	1865.70	278.00
GR	1865.60	283.00	1865.50	286.00	1865.20	297.50	1864.90	309.00	1864.80	314.00
GR	1864.57	326.00	1864.33	338.00	1864.10	350.00	1864.00	351.00	1864.00	367.00
GR	1864.00	383.00	1864.80	385.00	1865.10	387.00	1865.80	391.00	1865.90	393.00
GR	1866.00	395.00	1865.60	397.00	1865.30	398.00	1865.30	399.00	1865.40	400.00
GR	1865.50	403.00	1865.60	405.00	1865.60	407.00	1865.60	408.00	1865.60	411.00
GR	1865.60	412.00	1865.60	413.00	1865.60	414.00	1865.60	415.00	1865.60	416.00
GR	1865.60	417.00	1865.50	419.00	1865.50	420.00	1865.40	421.00	1865.10	426.00
GR	1865.10	427.00	1865.10	428.00	1864.65	439.00	1864.20	450.00	1864.30	455.00
GR	1864.30	459.00	1864.30	462.00	1864.30	463.00	1864.40	465.00	1864.50	466.00
GR	1864.60	467.00	1864.70	477.50	1864.80	488.00	1864.70	490.00	1864.70	492.00
GR	1864.70	495.00	1864.60	498.00	1864.60	500.00	1864.60	503.00	1864.60	507.00
GR	1864.60	511.00	1864.60	513.00	1864.60	520.00	1864.50	524.00	1864.40	531.00
GR	1864.30	538.00	1864.20	539.00	1864.10	544.00	1864.05	555.50	1864.00	567.00
GR	1864.10	582.00	1864.07	598.00	1864.05	614.00	1864.02	630.00	1864.00	646.00
GR	1864.17	660.67	1864.33	675.33	1864.50	690.00	1864.50	695.00	1864.50	696.00
GR	1864.50	697.00	1864.50	703.00	1864.40	705.00	1864.40	707.00	1864.40	709.00
GR	1864.40	710.00	1864.40	711.00	1864.40	712.00	1864.40	714.00	1864.40	716.00
GR	1864.40	719.00	1864.30	722.00	1864.30	724.00	1864.20	725.00	1864.20	727.00
GR	1864.20	729.00	1864.10	732.00	1864.10	737.00	1864.10	738.00	1864.10	741.00
GR	1864.00	744.00	1864.00	748.00	1864.00	749.00	1863.90	754.00	1863.80	759.00
GR	1863.80	763.00	1863.80	765.00	1863.80	766.00	1863.70	771.00	1863.60	777.00
GR	1863.60	779.00	1863.50	786.00	1863.50	788.00	1863.50	791.00	1863.40	795.00
GR	1863.30	798.00	1863.30	800.00						
X1	100.00	103.00	0.00	800.00	100.00	100.00	100.00	0.00	0.00	0.00
X3					26.00					
GR	1867.70	0.00	1867.70	4.00	1867.70	6.00	1867.77	22.50	1867.85	39.00

GR 1867.92 55.50 1868.00 72.00 1867.74 88.60 1867.48 105.20 1867.22 121.80  
 GR 1866.96 138.40 1866.70 155.00 1866.70 160.00 1866.70 165.00 1866.60 179.00  
 GR 1866.40 193.00 1866.30 204.50 1866.20 216.00 1866.15 230.75 1866.10 245.50  
 GR 1866.05 260.25 1866.00 275.00 1865.80 285.50 1865.60 296.00 1865.70 301.00  
 GR 1865.80 302.00 1865.90 304.00 1866.00 307.00 1865.90 309.00 1865.91 324.62  
 GR 1865.92 340.25 1865.94 355.88 1865.95 371.50 1865.96 387.12 1865.97 402.75  
 GR 1865.99 418.38 1866.00 434.00 1866.00 435.00 1866.00 439.00 1866.00 441.00  
 GR 1866.00 442.00 1866.00 458.00 1866.00 474.00 1866.00 490.00 1866.00 506.00  
 GR 1866.00 522.00 1865.90 528.00 1865.90 533.00 1865.90 534.00 1865.90 537.00  
 GR 1865.80 539.00 1865.80 540.00 1865.80 541.00 1865.60 552.00 1865.50 556.00  
 GR 1865.40 558.00 1865.40 561.00 1865.30 564.00 1865.20 567.00 1865.20 569.00  
 GR 1865.20 573.00 1865.10 574.00 1865.10 576.00 1865.10 578.00 1865.00 580.00  
 GR 1865.00 582.00 1865.00 583.00 1865.00 586.00 1865.20 592.00 1865.20 593.00  
 GR 1865.20 596.00 1865.20 597.00 1865.20 598.00 1865.20 599.00 1865.00 601.00  
 GR 1865.00 603.00 1865.10 604.00 1865.10 605.00 1865.10 606.00 1865.20 608.00  
 GR 1865.20 610.00 1865.20 611.00 1865.20 612.00 1865.00 618.00 1865.00 620.00  
 GR 1865.00 621.00 1864.90 623.00 1864.90 624.00 1865.00 626.00 1865.00 627.00  
 GR 1865.00 628.00 1865.00 629.00 1865.00 632.00 1864.90 634.00 1864.90 635.00  
 GR 1864.90 636.00 1865.00 645.00 1865.10 646.00 1865.10 647.00 1865.40 660.33  
 GR 1865.70 673.67 1866.00 687.00 1865.80 697.00 1865.60 707.00 1865.60 709.00  
 GR 1865.50 710.00 1865.50 713.00 1865.50 714.00 1865.30 726.00 1865.30 727.00  
 GR 1865.30 729.00 1865.20 731.00 1865.20 732.00 1865.20 733.00 1865.10 735.00  
 GR 1865.00 738.00 1864.90 742.00 1864.60 749.00 1864.30 758.00 1864.20 761.00  
 GR 1864.00 772.00 1864.10 774.00 1864.10 776.00 1864.10 777.00 1864.20 782.00  
 GR 1864.20 787.00 1864.30 790.00 1864.30 792.00 1864.30 800.00  
 X1 200.00 85.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 22.00  
 GR 1868.00 0.00 1867.92 15.67 1867.84 31.33 1867.77 47.00 1867.69 62.67  
 GR 1867.61 78.33 1867.53 94.00 1867.46 109.67 1867.38 125.33 1867.30 141.00  
 GR 1867.30 147.00 1867.20 151.00 1867.20 153.00 1867.30 167.00 1867.20 169.00  
 GR 1867.20 174.00 1867.10 180.00 1867.20 183.00 1867.20 185.00 1867.20 187.00  
 GR 1867.30 199.00 1867.30 207.00 1867.30 211.00 1867.30 215.00 1867.30 226.00  
 GR 1867.20 229.00 1867.20 237.00 1867.20 240.00 1867.30 242.00 1867.30 246.00  
 GR 1867.10 256.00 1866.90 266.00 1866.80 269.00 1866.80 273.00 1866.45 289.50  
 GR 1866.10 306.00 1866.00 315.00 1866.15 324.50 1866.30 334.00 1866.30 338.00  
 GR 1866.40 345.00 1866.40 354.00 1866.40 357.00 1866.40 361.00 1866.40 367.00  
 GR 1866.40 372.00 1866.40 376.00 1866.40 379.00 1866.50 388.50 1866.60 398.00  
 GR 1866.60 400.00 1866.70 410.00 1866.70 419.00 1866.80 424.00 1866.80 428.00  
 GR 1866.90 433.00 1866.80 441.00 1866.80 448.00 1866.90 451.00 1866.90 455.00  
 GR 1866.90 459.00 1867.00 463.00 1867.00 469.00 1866.90 472.00 1866.90 474.00  
 GR 1866.80 476.00 1866.80 480.00 1866.90 484.00 1866.90 487.00 1866.90 492.00  
 GR 1867.00 495.00 1867.00 497.00 1867.00 502.00 1867.00 510.00 1867.00 519.00  
 GR 1866.90 521.00 1866.90 523.00 1866.80 527.00 1866.80 531.00 1866.80 534.00  
 GR 1866.80 540.00 1866.70 545.00 1866.65 555.00 1866.60 565.00 1866.60 573.00  
 GR 1866.70 579.00 1866.70 582.00 1866.70 586.00 1866.80 588.00 1866.70 598.00  
 GR 1866.60 606.00 1866.60 609.00 1866.53 625.70 1866.46 642.40 1866.39 659.10  
 GR 1866.32 675.80 1866.25 692.50 1866.18 709.20 1866.11 725.90 1866.04 742.60  
 GR 1865.97 759.30 1865.90 776.00 1865.90 781.00 1865.80 785.00 1865.80 790.00  
 GR 1865.90 793.00 1866.00 797.00  
 X1 300.00 126.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 22.00  
 GR 1868.50 0.00 1868.40 4.00 1868.40 9.00 1868.40 11.00 1868.40 16.00  
 GR 1868.40 21.00 1868.40 22.00 1868.40 24.00 1868.40 26.00 1868.40 34.00  
 GR 1868.40 38.00 1868.40 41.00 1868.40 42.00 1868.40 44.00 1868.40 47.00  
 GR 1868.40 50.00 1868.30 54.00 1868.30 56.00 1868.30 60.00 1868.20 64.00  
 GR 1868.20 73.00 1868.10 85.00 1868.00 93.00 1868.00 96.00 1868.00 111.55  
 GR 1868.00 127.09 1868.00 142.64 1868.00 158.18 1868.00 173.73 1868.00 189.27  
 GR 1868.00 204.82 1868.00 220.36 1868.00 235.91 1868.00 251.45 1868.00 267.00  
 GR 1867.80 280.50 1867.60 294.00 1867.70 298.00 1867.70 300.00 1867.70 314.00  
 GR 1867.70 328.00 1867.70 332.00 1867.70 336.00 1867.70 340.00 1867.70 343.00  
 GR 1867.70 345.00 1867.70 346.00 1867.70 349.00 1867.70 351.00 1867.60 354.00  
 GR 1867.60 357.00 1867.60 358.00 1867.60 359.00 1867.60 364.00 1867.60 365.00

GR 1867.50 369.00 1867.50 372.00 1867.50 375.00 1867.50 378.00 1867.50 379.00  
 GR 1867.50 387.00 1867.50 389.00 1867.50 393.00 1867.50 394.00 1867.50 399.00  
 GR 1867.50 400.00 1867.50 402.00 1867.40 403.00 1867.40 413.00 1867.50 417.00  
 GR 1867.50 419.00 1867.50 427.00 1867.60 429.00 1867.60 433.00 1867.60 434.00  
 GR 1867.70 438.00 1867.70 443.00 1867.70 444.00 1867.60 445.00 1867.70 459.00  
 GR 1867.80 473.00 1867.90 487.00 1868.00 501.00 1867.93 514.75 1867.85 528.50  
 GR 1867.78 542.25 1867.70 556.00 1867.70 559.00 1867.75 569.50 1867.80 580.00  
 GR 1867.80 587.00 1867.90 588.00 1867.90 595.00 1868.00 598.00 1868.00 601.00  
 GR 1868.00 614.00 1868.00 615.00 1867.90 618.00 1867.80 621.00 1867.70 622.00  
 GR 1867.60 624.00 1867.60 625.00 1867.50 627.00 1867.40 629.00 1867.40 630.00  
 GR 1867.30 632.00 1867.30 636.00 1867.30 646.00 1867.30 648.00 1867.30 654.00  
 GR 1867.30 655.00 1867.30 659.00 1867.30 662.00 1867.30 663.00 1867.20 665.00  
 GR 1867.10 680.00 1867.10 682.00 1867.10 684.00 1867.20 687.00 1867.60 695.00  
 GR 1867.60 696.00 1867.60 699.00 1867.60 700.00 1867.70 701.00 1867.70 703.00  
 GR 1867.70 704.00 1867.70 705.00 1867.70 706.00 1867.60 707.00 1867.60 708.00  
 GR 1867.60 709.00 1867.60 711.00 1867.50 713.00 1867.50 716.00 1867.50 719.00  
 GR 1867.45 735.50 1867.40 752.00 1867.35 768.50 1867.30 785.00 1867.30 786.00  
 GR 1867.40 789.00 1867.30 790.00 1867.30 791.00 1867.40 795.00 1867.40 796.00  
 GR 1867.40 797.00 1867.40 798.00 1867.40 800.00

X1 400.00 90.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00

X3 21.00

GR 1868.70 0.00 1868.60 13.00 1868.50 26.00 1868.40 36.00 1868.40 38.00  
 GR 1868.65 51.00 1868.90 64.00 1869.00 66.00 1869.00 68.00 1869.20 71.00  
 GR 1869.20 73.00 1869.20 76.00 1869.30 80.00 1869.05 90.00 1868.80 100.00  
 GR 1868.70 102.00 1868.50 107.00 1868.30 109.00 1868.10 114.00 1868.19 129.75  
 GR 1868.28 145.50 1868.36 161.25 1868.45 177.00 1868.54 192.75 1868.63 208.50  
 GR 1868.71 224.25 1868.80 240.00 1868.80 244.00 1868.80 248.00 1868.70 257.00  
 GR 1868.80 263.00 1868.80 267.00 1868.80 271.00 1868.80 282.00 1868.80 286.00  
 GR 1868.70 289.00 1868.70 292.00 1868.70 295.00 1868.60 299.00 1868.60 303.00  
 GR 1868.50 310.00 1868.50 317.00 1868.60 319.00 1868.60 322.00 1868.60 326.00  
 GR 1868.70 332.00 1868.70 335.00 1868.80 338.00 1868.80 340.00 1868.90 345.00  
 GR 1868.80 349.00 1868.80 352.00 1868.80 356.00 1868.70 358.00 1868.70 363.00  
 GR 1868.60 372.00 1868.60 377.00 1868.70 380.00 1868.70 384.00 1868.70 389.00  
 GR 1868.60 397.00 1868.60 409.00 1868.70 412.00 1868.70 417.00 1868.70 430.00  
 GR 1868.60 437.00 1868.60 443.00 1868.50 448.00 1868.40 454.00 1868.30 461.00  
 GR 1868.30 468.00 1868.27 484.67 1868.23 501.33 1868.20 518.00 1868.17 534.67  
 GR 1868.13 551.33 1868.10 568.00 1868.30 573.00 1868.50 582.00 1868.60 587.00  
 GR 1868.70 590.00 1868.80 594.00 1868.90 597.00 1868.90 600.00 1868.90 609.00  
 GR 1868.90 618.00 1868.80 620.00 1868.80 626.00 1868.65 635.50 1868.50 645.00  
 GR 1868.50 654.00 1868.50 658.00 1868.50 661.00 1868.60 663.00 1868.70 665.00  
 GR 1868.70 667.00 1868.80 671.00 1868.80 673.00 1868.80 678.00 1868.80 682.00  
 GR 1868.80 685.00 1868.80 690.00 1868.70 698.00 1868.60 705.00 1868.40 718.00  
 GR 1868.20 730.00 1868.16 744.00 1868.12 758.00 1868.08 772.00 1868.04 786.00  
 GR 1868.00 800.00

X1 500.00 84.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00

X3 21.00

GR 1870.00 0.00 1869.95 15.91 1869.91 31.82 1869.86 47.73 1869.82 63.64  
 GR 1869.77 79.55 1869.73 95.45 1869.68 111.36 1869.64 127.27 1869.59 143.18  
 GR 1869.55 159.09 1869.50 175.00 1869.50 178.00 1869.50 182.00 1869.60 195.60  
 GR 1869.70 209.20 1869.80 222.80 1869.90 236.40 1870.00 250.00 1869.90 255.00  
 GR 1869.80 265.00 1869.70 272.00 1869.70 278.00 1869.60 284.00 1869.60 287.00  
 GR 1869.60 294.00 1869.60 299.00 1869.60 307.00 1869.50 314.00 1869.60 320.00  
 GR 1869.60 323.00 1869.60 325.00 1869.70 328.00 1869.80 331.00 1869.80 334.00  
 GR 1869.70 338.00 1869.70 340.00 1869.70 344.00 1869.80 346.00 1869.80 348.00  
 GR 1869.90 356.00 1869.90 361.00 1869.80 366.00 1869.80 368.00 1869.80 373.00  
 GR 1869.70 382.00 1869.60 388.00 1869.50 393.00 1869.40 409.50 1869.30 426.00  
 GR 1869.30 431.00 1869.40 433.00 1869.50 446.00 1869.60 459.00 1869.60 463.00  
 GR 1869.50 466.00 1869.55 482.50 1869.60 499.00 1869.65 515.50 1869.70 532.00  
 GR 1869.50 549.00 1869.50 551.00 1869.50 562.00 1869.50 564.00 1869.50 573.00  
 GR 1869.50 582.00 1869.60 590.00 1869.80 598.00 1869.90 601.00 1870.00 608.00  
 GR 1870.10 612.00 1870.10 616.00 1870.20 620.00 1870.20 625.00 1870.20 630.00  
 GR 1870.20 638.00 1870.10 643.00 1870.10 648.00 1870.00 653.00 1870.00 657.00

GR 1869.80 670.00 1869.75 682.00 1869.70 694.00 1869.70 696.00 1869.80 699.00  
 GR 1869.80 704.00 1869.80 708.00 1869.70 713.00 1869.70 715.00 1869.60 717.00  
 GR 1869.50 724.00 1869.40 728.00 1869.20 735.00 1869.10 739.00 1869.00 742.00  
 GR 1868.90 745.00 1868.80 748.00 1868.70 751.00 1868.60 766.00 1868.60 770.00  
 GR 1868.60 772.00 1868.70 774.00 1868.70 777.00 1868.70 779.00 1868.70 784.00  
 X1 600.00 95.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 18.00  
 GR 1870.00 0.00 1870.00 16.70 1870.00 33.40 1870.00 50.10 1870.00 66.80  
 GR 1870.00 83.50 1870.00 100.20 1870.00 116.90 1870.00 133.60 1870.00 150.30  
 GR 1870.00 167.00 1870.20 176.00 1870.30 191.50 1870.40 207.00 1870.50 214.00  
 GR 1870.60 218.00 1870.70 221.00 1870.70 224.00 1870.80 227.00 1870.80 230.00  
 GR 1870.65 243.50 1870.50 257.00 1870.35 268.50 1870.20 280.00 1870.50 282.00  
 GR 1870.80 285.00 1871.20 302.00 1871.10 306.00 1871.10 311.00 1871.20 314.00  
 GR 1871.20 321.00 1871.30 323.00 1871.20 329.00 1871.20 333.00 1871.10 336.00  
 GR 1870.90 340.00 1870.90 344.00 1870.80 349.00 1870.80 352.00 1870.70 358.00  
 GR 1870.60 361.00 1870.60 363.00 1870.60 366.00 1870.65 379.00 1870.70 392.00  
 GR 1870.60 396.00 1870.60 401.00 1870.50 414.00 1870.50 420.00 1870.50 436.00  
 GR 1870.40 446.00 1870.20 456.00 1870.20 461.00 1870.13 474.67 1870.07 488.33  
 GR 1870.00 502.00 1870.10 509.00 1870.30 518.00 1870.40 524.00 1870.50 531.00  
 GR 1870.50 536.00 1870.60 542.00 1870.70 545.00 1870.70 551.00 1870.80 557.00  
 GR 1870.90 559.00 1871.00 566.00 1871.00 569.00 1871.00 573.00 1870.90 576.00  
 GR 1870.90 578.00 1870.90 584.00 1870.90 590.00 1870.90 595.00 1870.90 597.00  
 GR 1871.00 600.00 1871.10 603.00 1871.10 606.00 1871.20 609.00 1871.20 611.00  
 GR 1871.20 613.00 1871.20 618.00 1871.20 622.00 1871.20 624.00 1871.10 627.00  
 GR 1871.10 630.00 1871.10 632.00 1871.00 641.00 1871.10 644.00 1871.00 650.00  
 GR 1870.90 660.00 1870.80 670.00 1870.70 673.00 1870.60 678.00 1870.50 681.00  
 GR 1870.40 683.00 1870.30 685.00 1870.10 689.00 1870.07 704.33 1870.03 719.67  
 GR 1870.00 735.00 1870.20 740.00 1870.20 746.00 1870.10 751.00 1870.10 764.00  
 GR 1870.10 770.00 1870.00 776.00 1870.20 778.00 1870.50 783.00 1870.60 789.00  
 GR 1870.60 793.00 1870.60 797.00 1870.60 800.00  
 X1 700.00 108.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 16.00  
 GR 1870.70 0.00 1870.70 2.00 1870.70 8.00 1870.80 11.00 1870.80 14.00  
 GR 1870.80 18.00 1870.90 31.00 1870.90 36.00 1870.90 43.00 1870.90 47.00  
 GR 1870.90 53.00 1870.90 60.00 1871.00 66.00 1871.00 70.00 1871.00 73.00  
 GR 1871.00 76.00 1871.00 79.00 1870.90 81.00 1870.90 84.00 1870.90 87.00  
 GR 1871.00 89.00 1871.00 92.00 1871.00 98.00 1871.00 101.00 1871.10 104.00  
 GR 1871.00 108.00 1871.00 114.00 1871.10 117.00 1871.20 119.00 1871.20 122.00  
 GR 1871.20 125.00 1871.30 128.00 1871.20 131.00 1871.20 134.00 1871.20 137.00  
 GR 1871.10 141.00 1871.10 143.00 1871.00 145.00 1871.00 151.00 1870.90 159.00  
 GR 1870.95 168.50 1871.00 178.00 1871.00 181.00 1871.00 189.00 1871.00 192.00  
 GR 1871.10 194.00 1871.10 196.00 1871.20 201.00 1871.30 208.00 1871.20 211.00  
 GR 1871.25 220.00 1871.30 229.00 1871.30 233.00 1871.30 238.00 1871.40 244.00  
 GR 1871.40 250.00 1871.50 254.00 1871.60 258.00 1871.60 262.00 1871.80 274.00  
 GR 1871.80 277.00 1871.90 284.00 1871.93 300.33 1871.97 316.67 1872.00 333.00  
 GR 1871.80 349.50 1871.60 366.00 1871.60 371.00 1871.50 382.50 1871.40 394.00  
 GR 1871.40 398.00 1871.40 402.00 1871.30 408.00 1871.30 412.00 1871.30 415.00  
 GR 1871.20 422.00 1871.20 427.00 1871.20 431.00 1871.30 434.00 1871.20 437.00  
 GR 1871.20 439.00 1871.20 442.00 1871.10 448.00 1871.00 452.00 1871.00 454.00  
 GR 1871.00 456.00 1870.90 458.00 1870.90 475.00 1870.90 483.00 1871.00 486.00  
 GR 1871.10 488.00 1871.20 491.00 1871.40 493.00 1871.40 495.00 1871.50 509.83  
 GR 1871.60 524.67 1871.70 539.50 1871.80 554.33 1871.90 569.17 1872.00 584.00  
 GR 1872.10 588.00 1872.10 590.00 1872.20 595.00 1872.20 598.00 1872.20 608.00  
 GR 1872.10 623.83 1872.00 639.67 1871.90 655.50 1871.80 671.33 1871.70 687.17  
 GR 1871.60 703.00 1871.60 708.00 1871.50 712.00 1871.50 716.00 1871.40 719.00  
 GR 1871.40 725.00 1871.50 728.00 1871.70 737.00 1871.90 744.00 1872.00 751.00  
 GR 1872.10 755.00 1872.20 760.00 1872.20 772.00 1872.10 780.00  
 X1 800.00 119.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 18.00  
 GR 1871.80 0.00 1871.80 4.00 1871.80 8.00 1871.80 23.00 1872.00 26.00  
 GR 1872.00 42.43 1872.00 58.86 1872.00 75.29 1872.00 91.71 1872.00 108.14  
 GR 1872.00 124.57 1872.00 141.00 1872.10 149.00 1872.20 152.00 1872.17 166.50

GR 1872.15 181.00 1872.12 195.50 1872.10 210.00 1872.20 215.00 1872.40 221.00  
 GR 1872.60 229.00 1872.70 236.00 1872.70 245.00 1872.80 249.00 1872.90 251.00  
 GR 1873.00 254.00 1873.00 257.00 1873.10 259.00 1873.00 262.00 1872.90 264.00  
 GR 1872.80 266.00 1872.80 270.00 1872.80 272.00 1872.90 274.00 1873.10 275.00  
 GR 1873.10 277.00 1873.10 282.00 1873.20 289.00 1873.10 292.00 1873.00 294.00  
 GR 1873.00 296.00 1872.90 299.00 1872.90 302.00 1872.80 306.00 1872.70 311.00  
 GR 1872.60 316.00 1872.30 323.00 1872.27 339.50 1872.24 356.00 1872.21 372.50  
 GR 1872.18 389.00 1872.15 405.50 1872.12 422.00 1872.09 438.50 1872.06 455.00  
 GR 1872.03 471.50 1872.00 488.00 1872.10 493.00 1872.20 499.00 1872.30 503.00  
 GR 1872.30 507.00 1872.40 511.00 1872.40 513.00 1872.50 517.00 1872.50 525.00  
 GR 1872.40 527.00 1872.40 534.00 1872.40 536.00 1872.40 542.00 1872.50 545.00  
 GR 1872.50 547.00 1872.60 550.00 1872.70 552.00 1872.70 555.00 1872.70 557.00  
 GR 1872.80 559.00 1872.80 563.00 1872.80 570.00 1872.90 572.00 1873.00 575.00  
 GR 1872.90 578.00 1873.00 583.00 1873.00 586.00 1873.10 589.00 1873.20 591.00  
 GR 1873.20 594.00 1873.20 598.00 1873.10 600.00 1872.90 602.00 1872.90 604.00  
 GR 1872.80 606.00 1872.70 608.00 1872.60 610.00 1872.50 612.00 1872.40 614.00  
 GR 1872.40 616.00 1872.30 618.00 1872.20 621.00 1872.20 625.00 1872.20 628.00  
 GR 1872.10 633.00 1872.20 640.00 1872.20 646.00 1872.30 651.00 1872.20 654.00  
 GR 1872.20 658.00 1872.30 668.00 1872.30 671.00 1872.40 675.00 1872.50 681.00  
 GR 1872.60 686.00 1872.70 697.00 1872.80 700.00 1872.80 704.00 1872.90 710.00  
 GR 1872.90 715.00 1873.00 717.00 1873.00 720.00 1873.00 723.00 1872.90 726.00  
 GR 1872.90 729.00 1872.90 731.00 1872.90 736.00 1872.90 738.00 1872.80 740.00  
 GR 1872.80 746.00 1872.80 751.00 1872.80 760.00 1872.90 764.00 1872.90 767.00  
 GR 1872.90 771.00 1873.00 777.00 1873.10 780.00 1873.20 784.00 1873.20 786.00  
 GR 1873.20 793.00 1873.20 797.00  
 X1 900.00 131.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 11.00  
 GR 1873.50 0.00 1873.50 5.00 1873.50 13.00 1873.40 16.00 1873.40 20.00  
 GR 1873.30 25.00 1873.30 29.00 1873.20 34.00 1873.20 38.00 1873.20 42.00  
 GR 1873.10 44.00 1873.10 47.00 1873.10 50.00 1873.00 55.00 1872.90 57.00  
 GR 1872.80 60.00 1872.80 62.00 1872.80 67.00 1872.80 71.00 1872.80 73.00  
 GR 1872.70 76.00 1872.70 81.00 1872.70 94.00 1872.60 96.00 1872.70 102.00  
 GR 1872.70 105.00 1872.80 108.00 1872.90 114.00 1873.00 117.00 1873.10 121.00  
 GR 1873.30 127.00 1873.40 134.00 1873.60 141.00 1873.80 152.00 1873.90 165.00  
 GR 1874.00 178.00 1873.70 187.00 1873.60 191.00 1873.30 194.00 1873.20 196.00  
 GR 1873.20 206.00 1873.20 216.00 1873.30 220.00 1873.30 223.00 1873.40 227.00  
 GR 1873.50 232.00 1873.60 237.00 1873.80 244.00 1874.00 251.00 1874.10 255.00  
 GR 1874.20 261.00 1874.20 266.00 1874.30 268.00 1874.40 273.00 1874.30 281.00  
 GR 1874.20 288.00 1874.10 292.00 1874.00 294.00 1873.90 297.00 1873.80 301.00  
 GR 1873.70 306.00 1873.60 313.00 1873.80 323.00 1873.90 325.00 1873.80 330.00  
 GR 1873.70 336.00 1873.50 341.00 1873.50 343.00 1873.30 351.00 1873.10 357.00  
 GR 1872.90 361.00 1872.90 363.00 1872.90 367.00 1872.80 369.00 1872.80 372.00  
 GR 1872.80 374.00 1872.90 377.00 1872.90 380.00 1872.90 382.00 1873.00 386.00  
 GR 1872.90 390.00 1873.00 393.00 1872.90 395.00 1872.80 400.00 1872.80 403.00  
 GR 1872.70 405.00 1872.70 410.00 1872.60 412.00 1872.65 423.50 1872.70 435.00  
 GR 1872.70 440.00 1872.80 442.00 1872.80 446.00 1872.90 449.00 1873.10 461.50  
 GR 1873.30 474.00 1873.00 482.00 1873.00 486.00 1873.00 488.00 1873.00 491.00  
 GR 1873.00 493.00 1873.10 495.00 1873.10 498.00 1873.10 501.00 1873.20 504.00  
 GR 1873.30 509.00 1873.40 516.00 1873.50 524.00 1873.70 531.00 1873.80 538.00  
 GR 1873.90 545.00 1873.90 548.00 1873.90 553.00 1874.00 559.00 1874.00 563.00  
 GR 1874.10 567.00 1874.10 571.00 1874.10 574.00 1874.05 588.50 1874.00 603.00  
 GR 1873.90 608.00 1873.92 623.67 1873.93 639.33 1873.95 655.00 1873.97 670.67  
 GR 1873.98 686.33 1874.00 702.00 1874.00 705.00 1874.10 714.00 1874.10 721.00  
 GR 1874.20 736.00 1874.20 741.00 1874.20 743.00 1874.10 749.00 1874.00 755.00  
 GR 1874.00 759.00 1874.10 769.00 1874.00 774.00 1874.00 783.50 1874.00 793.00  
 GR 1874.00 795.00 1874.20 799.00  
 X1 1000.00 156.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 7.00  
 GR 1874.60 0.00 1874.50 4.00 1874.40 10.00 1874.40 16.00 1874.30 18.00  
 GR 1874.30 21.00 1874.30 23.00 1874.30 27.00 1874.30 31.00 1874.20 40.00  
 GR 1874.20 47.00 1874.10 56.00 1874.05 72.00 1874.00 88.00 1873.90 103.00  
 GR 1873.90 109.00 1873.90 116.00 1873.80 123.00 1873.90 138.00 1874.00 140.00

GR 1874.10 144.00 1874.20 148.00 1874.30 155.00 1874.50 164.00 1874.40 176.00  
 GR 1874.30 188.00 1874.20 192.00 1874.20 197.00 1874.40 207.00 1874.50 211.00  
 GR 1874.60 213.00 1874.60 215.00 1874.70 218.00 1874.70 222.00 1874.60 233.00  
 GR 1874.60 238.00 1874.60 244.00 1874.60 249.00 1874.70 251.00 1874.70 253.00  
 GR 1874.80 256.00 1874.90 260.00 1874.90 263.00 1875.00 267.00 1875.10 273.00  
 GR 1875.20 276.00 1875.20 280.00 1875.30 284.00 1875.30 290.00 1875.40 294.00  
 GR 1875.40 296.00 1875.50 298.00 1875.50 301.00 1875.60 303.00 1875.60 305.00  
 GR 1875.60 307.00 1875.70 309.00 1875.70 311.00 1875.70 314.00 1875.60 317.00  
 GR 1875.60 322.00 1875.70 325.00 1875.60 327.00 1875.50 329.00 1875.50 331.00  
 GR 1875.50 333.00 1875.40 336.00 1875.40 340.00 1875.30 344.00 1875.40 347.00  
 GR 1875.30 351.00 1875.20 353.00 1875.10 356.00 1875.00 360.00 1874.90 367.00  
 GR 1874.80 371.00 1874.80 373.00 1874.70 379.00 1874.60 385.00 1874.40 392.00  
 GR 1874.40 396.00 1874.20 405.00 1874.18 420.80 1874.16 436.60 1874.14 452.40  
 GR 1874.12 468.20 1874.10 484.00 1874.20 487.00 1874.30 490.00 1874.40 493.00  
 GR 1874.60 496.00 1874.70 504.00 1874.70 506.00 1874.80 508.00 1874.80 510.00  
 GR 1874.80 514.00 1874.80 517.00 1874.80 523.00 1874.80 526.00 1874.90 530.00  
 GR 1874.90 533.00 1874.90 535.00 1875.00 538.00 1875.00 541.00 1875.10 548.00  
 GR 1875.10 551.00 1875.10 554.00 1875.10 560.00 1875.10 563.00 1875.10 568.00  
 GR 1875.00 572.00 1875.00 576.00 1874.90 578.00 1874.90 581.00 1874.80 584.00  
 GR 1874.80 587.00 1874.80 589.00 1874.70 595.00 1874.60 598.00 1874.50 601.00  
 GR 1874.40 604.00 1874.30 608.00 1874.20 612.00 1874.20 617.00 1874.10 621.00  
 GR 1874.10 627.00 1874.10 632.00 1874.20 637.00 1874.30 643.00 1874.30 649.00  
 GR 1874.50 656.00 1874.60 660.00 1874.70 663.00 1874.70 668.00 1874.70 672.00  
 GR 1874.80 675.00 1874.80 677.00 1874.80 688.50 1874.80 700.00 1874.90 703.00  
 GR 1874.90 707.00 1875.00 711.00 1875.00 715.00 1875.10 719.00 1875.20 721.00  
 GR 1875.20 724.00 1875.20 728.00 1875.20 732.00 1875.30 736.00 1875.30 739.00  
 GR 1875.30 744.00 1875.30 747.00 1875.30 757.00 1875.20 760.00 1875.20 764.00  
 GR 1875.20 772.00 1875.20 776.00 1875.30 778.00 1875.30 784.00 1875.30 790.00  
 GR 1875.20 795.00 1875.20 798.00 1875.10 800.00

X1 1100.00 60.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00

X3 11.00

GR 1876.50 231.00 1876.55 245.50 1876.60 260.00 1876.60 266.00 1876.50 269.00  
 GR 1876.50 277.00 1876.50 284.00 1876.50 289.00 1876.50 293.00 1876.50 297.00  
 GR 1876.30 303.00 1876.40 305.00 1876.50 309.00 1876.50 312.00 1876.50 314.00  
 GR 1876.30 325.00 1876.10 336.00 1875.70 351.75 1875.30 367.50 1874.90 383.25  
 GR 1874.50 399.00 1874.30 408.00 1874.10 417.00 1874.10 432.00 1874.30 437.00  
 GR 1874.50 440.00 1874.60 444.00 1874.30 458.00 1874.20 465.00 1874.20 470.00  
 GR 1874.20 472.00 1874.40 478.00 1874.50 480.00 1874.50 483.00 1874.60 486.00  
 GR 1874.70 489.00 1874.80 493.00 1874.92 507.33 1875.03 521.67 1875.15 536.00  
 GR 1875.27 550.33 1875.38 564.67 1875.50 579.00 1875.40 584.00 1875.40 587.00  
 GR 1875.30 590.00 1875.30 603.00 1875.40 606.00 1875.50 609.00 1875.50 613.00  
 GR 1875.50 619.00 1875.40 627.00 1875.40 632.00 1875.50 634.00 1875.50 638.00  
 GR 1875.50 641.00 1875.50 646.00 1875.65 655.00 1875.80 664.00 1875.90 666.00  
 GR 1876.00 669.00 1876.10 671.00 1876.10 674.00 1876.20 678.00 1876.20 682.00  
 GR 1876.30 685.00 1876.30 688.00 1876.30 694.00 1876.30 697.00 1876.30 702.00  
 GR 1876.30 704.00

X1 1200.00 75.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00

X3 10.00

GR 1877.50 251.00 1877.50 255.00 1877.50 259.00 1877.60 267.00 1877.73 280.67  
 GR 1877.87 294.33 1878.00 308.00 1878.10 313.00 1878.20 319.00 1878.20 326.00  
 GR 1878.10 331.00 1878.00 335.00 1877.15 347.00 1876.30 359.00 1875.90 369.00  
 GR 1875.90 374.00 1875.80 379.00 1875.70 382.00 1875.60 385.00 1875.50 387.00  
 GR 1875.40 392.00 1875.30 400.00 1875.30 403.00 1875.30 414.00 1875.30 416.00  
 GR 1875.30 422.00 1875.40 426.00 1875.70 429.00 1875.77 445.17 1875.83 461.33  
 GR 1875.90 477.50 1875.97 493.67 1876.03 509.83 1876.10 526.00 1876.40 531.00  
 GR 1876.55 542.50 1876.70 554.00 1876.55 563.50 1876.40 573.00 1876.40 577.00  
 GR 1876.30 579.00 1876.30 582.00 1876.30 584.00 1876.30 589.00 1876.30 591.00  
 GR 1876.30 594.00 1876.40 597.00 1876.40 604.00 1876.50 608.00 1876.50 612.00  
 GR 1876.60 615.00 1876.60 618.00 1876.60 622.00 1876.70 624.00 1876.70 627.00  
 GR 1876.70 630.00 1876.70 633.00 1876.70 635.00 1876.70 640.00 1876.70 645.00  
 GR 1876.70 650.00 1876.70 653.00 1876.80 658.00 1876.70 662.00 1876.70 667.00  
 GR 1876.70 672.00 1876.70 678.00 1876.70 686.00 1876.70 688.00 1876.70 691.00

GR 1876.80 694.00 1876.90 696.00 1877.00 698.00 1877.00 700.00 1877.10 702.00  
 GR 1877.10 705.00 1877.10 707.00 1877.10 712.00 1877.10 721.00 1877.10 725.00  
 GR 1877.10 733.00 1877.10 745.00 1877.10 747.00 1877.10 751.00 1877.10 753.00  
 X1 1300.00 75.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 3.00  
 GR 1879.30 300.00 1879.40 302.00 1879.40 305.00 1879.40 307.00 1879.30 309.00  
 GR 1879.30 311.00 1879.20 313.00 1879.10 315.00 1878.80 317.00 1878.70 325.00  
 GR 1878.50 332.00 1878.20 341.00 1877.90 347.00 1877.60 361.00 1877.40 366.00  
 GR 1877.30 373.00 1877.10 380.00 1877.10 383.00 1876.90 388.00 1876.90 391.00  
 GR 1876.80 394.00 1876.70 397.00 1876.70 400.00 1876.60 402.00 1876.50 404.00  
 GR 1876.50 412.00 1876.50 415.00 1876.50 418.00 1876.55 427.50 1876.60 437.00  
 GR 1876.70 440.00 1876.70 443.00 1876.70 446.00 1876.80 450.00 1876.80 454.00  
 GR 1876.80 471.00 1876.80 475.00 1876.80 478.00 1876.90 482.00 1876.90 486.00  
 GR 1877.00 491.00 1877.00 493.00 1877.10 499.00 1877.10 503.00 1877.20 508.00  
 GR 1877.30 512.00 1877.35 524.50 1877.40 537.00 1877.30 539.00 1877.30 542.00  
 GR 1877.30 546.00 1877.65 559.50 1878.00 573.00 1877.90 577.00 1877.70 594.00  
 GR 1877.60 600.00 1877.60 604.00 1877.60 608.00 1877.50 611.00 1877.50 617.00  
 GR 1877.60 628.00 1877.60 633.00 1877.60 638.00 1877.70 642.00 1877.70 650.00  
 GR 1877.80 657.00 1877.80 662.00 1877.90 671.00 1877.90 680.00 1877.90 685.00  
 GR 1877.90 692.00 1877.90 694.00 1877.90 697.00 1877.90 701.00 1877.90 709.00  
 GR 1877.90 713.00 1877.90 717.00 1877.90 722.00  
 X1 1400.00 90.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 3.00  
 GR 1880.30 233.00 1880.30 237.00 1880.20 243.00 1880.20 247.00 1880.20 255.00  
 GR 1880.30 260.00 1880.40 270.00 1880.30 272.00 1880.30 275.00 1880.30 277.00  
 GR 1880.10 282.00 1880.10 285.00 1880.10 290.00 1880.10 294.00 1880.00 298.00  
 GR 1879.90 303.00 1879.70 313.00 1879.80 317.00 1880.00 321.00 1880.10 324.00  
 GR 1880.10 330.00 1880.10 336.00 1879.80 342.00 1879.30 349.00 1878.00 361.00  
 GR 1877.90 364.00 1877.80 369.00 1877.70 373.00 1877.60 375.00 1877.50 378.00  
 GR 1877.50 395.00 1877.40 400.00 1877.40 405.00 1877.40 409.00 1877.50 412.00  
 GR 1877.50 415.00 1877.57 429.25 1877.65 443.50 1877.72 457.75 1877.80 472.00  
 GR 1877.80 479.00 1877.90 482.00 1878.00 486.00 1878.20 492.00 1878.40 499.00  
 GR 1878.50 501.00 1878.70 506.00 1878.80 509.00 1878.90 511.00 1879.00 515.00  
 GR 1879.00 519.00 1879.10 522.00 1879.20 525.00 1879.30 527.00 1879.40 530.00  
 GR 1879.40 533.00 1879.30 535.00 1879.30 537.00 1879.20 539.00 1879.10 541.00  
 GR 1879.00 546.00 1878.90 551.00 1878.80 557.00 1878.70 561.00 1878.60 563.00  
 GR 1878.40 574.00 1878.10 587.00 1878.10 604.00 1878.40 606.00 1878.60 608.00  
 GR 1878.80 611.00 1879.20 628.00 1879.20 630.00 1879.20 633.00 1879.20 636.00  
 GR 1879.20 639.00 1879.20 641.00 1879.30 644.00 1879.30 647.00 1879.30 649.00  
 GR 1879.30 652.00 1879.30 656.00 1879.30 658.00 1879.30 662.00 1879.20 672.00  
 GR 1879.20 674.00 1879.20 678.00 1879.20 680.00 1879.10 686.00 1879.10 691.00  
 GR 1879.10 698.00 1879.10 703.00 1879.10 705.00  
 X1 1500.00 70.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 20.00  
 GR 1880.80 0.00 1880.80 6.00 1880.90 12.00 1880.90 17.00 1880.90 19.00  
 GR 1880.90 24.00 1880.90 28.00 1880.90 32.00 1880.90 35.00 1881.00 49.00  
 GR 1881.10 51.00 1881.10 55.00 1881.20 57.00 1881.20 59.00 1881.20 61.00  
 GR 1881.20 63.00 1881.30 65.00 1881.30 67.00 1881.30 72.00 1881.30 79.00  
 GR 1881.20 81.00 1881.20 83.00 1881.00 87.00 1881.00 90.00 1880.90 92.00  
 GR 1880.80 97.00 1880.80 102.00 1880.70 105.00 1880.40 108.00 1880.20 115.00  
 GR 1880.13 131.00 1880.07 147.00 1880.00 163.00 1880.40 172.00 1880.70 179.00  
 GR 1881.00 185.00 1881.20 188.00 1881.20 190.00 1881.20 195.00 1881.20 201.00  
 GR 1881.30 216.12 1881.40 231.25 1881.50 246.38 1881.60 261.50 1881.70 276.62  
 GR 1881.80 291.75 1881.90 306.88 1882.00 322.00 1880.80 331.00 1880.00 340.00  
 GR 1879.45 355.00 1878.90 370.00 1878.90 380.00 1879.00 384.00 1879.00 386.00  
 GR 1879.00 389.00 1879.00 395.00 1878.90 405.00 1878.80 408.00 1878.70 411.00  
 GR 1878.40 417.00 1878.10 423.00 1878.05 438.00 1878.00 453.00 1878.40 461.00  
 GR 1878.95 471.50 1879.50 482.00 1879.80 488.00 1880.00 504.67 1880.20 521.33  
 GR 1880.40 538.00 1880.30 545.00 1880.30 552.00 1880.20 563.00 1880.20 568.00  
 GR 1880.20 574.00 1880.10 583.00 1880.10 590.00 1880.10 599.00 1880.10 609.00  
 GR 1880.10 619.00 1880.00 625.00 1879.85 641.17 1879.70 657.33 1879.55 673.50  
 GR 1879.40 689.67 1879.25 705.83 1879.10 722.00 1879.10 724.00 1879.10 728.00

X1	1600.00	70.00	0.00	800.00	100.00	100.00	100.00	0.00	0.00	0.00
X3					5.00					
GR	1881.30	496.00	1881.40	511.00	1881.40	513.00	1881.40	516.00	1881.40	520.00
GR	1881.40	521.00	1881.40	523.00	1881.40	525.00	1881.40	526.00	1881.40	528.00
GR	1881.30	538.00	1881.30	539.00	1881.30	541.00	1881.30	542.00	1881.30	545.00
GR	1881.20	546.00	1881.20	548.00	1881.20	549.00	1881.20	550.00	1881.20	552.00
GR	1881.20	553.00	1881.10	556.00	1881.10	559.00	1881.00	563.00	1881.00	564.00
GR	1881.00	565.00	1880.90	566.00	1880.90	567.00	1880.80	571.00	1880.80	575.00
GR	1880.80	578.00	1880.80	581.00	1880.75	591.50	1880.70	602.00	1880.60	605.00
GR	1880.60	608.00	1880.60	611.00	1880.60	613.00	1880.50	619.00	1880.50	621.00
GR	1880.40	625.00	1880.30	632.00	1880.30	636.00	1880.30	641.00	1880.20	645.00
GR	1880.20	648.00	1880.20	652.00	1880.20	654.00	1880.10	659.00	1880.10	664.00
GR	1880.07	675.67	1880.03	687.33	1880.00	699.00	1879.90	709.00	1879.90	713.00
GR	1879.80	719.00	1879.70	721.00	1879.53	737.67	1879.37	754.33	1879.20	771.00
GR	1879.20	774.00	1879.20	776.00	1879.20	781.00	1879.20	782.00	1879.20	784.00
GR	1879.20	786.00	1879.20	788.00	1879.20	791.00	1879.10	792.00	1879.10	794.00
GR	1879.00	795.00	1879.00	796.00	1879.00	797.00	1879.00	799.00	1879.00	800.00
X1	1700.00	30.00	0.00	800.00	100.00	100.00	100.00	0.00	0.00	0.00
X3					10.00					
GR	1882.00	524.00	1881.83	539.11	1881.67	554.22	1881.50	569.33	1881.33	584.44
GR	1881.17	599.56	1881.00	614.67	1880.83	629.78	1880.67	644.89	1880.50	660.00
GR	1880.50	663.00	1880.50	665.00	1880.40	666.00	1880.30	672.00	1880.30	673.00
GR	1880.30	675.00	1880.30	678.00	1880.20	682.00	1880.20	684.00	1880.20	688.00
GR	1880.20	689.00	1880.20	690.00	1880.20	691.00	1880.20	697.00	1880.10	702.00
GR	1880.10	706.00	1880.10	713.00	1880.00	718.00	1880.00	733.67	1880.00	749.33
GR	1880.00	765.00	1880.20	779.00	1880.20	785.00	1880.20	787.00	1880.30	790.00
GR	1880.30	793.00	1880.30	794.00	1880.40	796.00	1880.40	797.00	1880.40	800.00
X1	1800.00	110.00	0.00	800.00	100.00	100.00	100.00	0.00	0.00	0.00
X3				5.00						
GR	1883.50	0.00	1883.60	2.00	1883.60	6.00	1883.40	23.00	1883.40	25.00
GR	1883.30	29.00	1883.30	32.00	1883.20	38.00	1883.20	40.00	1883.20	43.00
GR	1883.10	45.00	1883.10	49.00	1883.10	56.00	1883.00	60.00	1883.00	62.00
GR	1882.90	65.00	1882.90	68.00	1882.80	71.00	1882.80	73.00	1882.80	78.00
GR	1882.80	81.00	1882.80	85.00	1882.80	91.00	1882.80	94.00	1882.90	107.00
GR	1883.00	112.00	1883.00	118.00	1883.00	122.00	1883.00	127.00	1883.00	130.00
GR	1883.10	135.00	1883.10	140.00	1883.10	144.00	1883.10	152.00	1883.10	156.00
GR	1883.10	158.00	1883.00	165.00	1883.10	171.00	1883.10	176.00	1883.10	179.00
GR	1883.20	184.00	1883.20	186.00	1883.30	188.00	1883.30	191.00	1883.40	197.00
GR	1883.50	199.00	1883.50	202.00	1883.60	208.00	1883.60	220.00	1883.60	223.00
GR	1883.50	225.00	1883.40	227.00	1883.20	233.00	1883.20	235.00	1883.20	239.00
GR	1883.10	242.00	1883.10	246.00	1882.90	252.00	1882.80	258.00	1882.70	265.00
GR	1882.50	274.00	1882.30	283.00	1882.10	292.00	1881.90	303.50	1881.70	315.00
GR	1881.40	329.00	1881.25	339.50	1881.10	350.00	1880.90	363.00	1880.80	369.00
GR	1880.70	373.00	1880.70	378.00	1880.60	382.00	1880.50	386.00	1880.50	388.00
GR	1880.50	395.00	1880.40	397.00	1880.40	400.00	1880.40	403.00	1880.40	405.00
GR	1880.40	409.00	1880.50	419.00	1880.60	421.00	1880.60	423.00	1880.70	425.00
GR	1880.80	427.00	1880.90	432.00	1880.90	434.00	1880.90	436.00	1880.90	440.00
GR	1880.90	442.00	1881.20	451.00	1881.40	455.00	1881.60	458.00	1881.80	464.00
GR	1881.80	469.00	1881.80	472.00	1881.90	477.00	1881.90	481.00	1881.75	490.00
GR	1881.60	499.00	1881.60	505.00	1881.50	509.00	1881.60	515.00	1881.60	522.00
GR	1881.60	533.50	1881.60	545.00	1881.70	555.00	1881.70	558.00	1881.80	566.00
GR	1881.80	573.00	1881.90	581.00	1881.90	594.00	1881.80	605.00	1881.80	610.00
X1	1900.00	85.00	0.00	800.00	100.00	100.00	100.00	0.00	0.00	0.00
X3				5.00						
GR	1883.60	220.00	1883.60	225.00	1883.60	228.00	1883.50	231.00	1883.50	233.00
GR	1883.40	235.00	1883.30	244.00	1883.30	246.00	1883.20	248.00	1883.20	252.00
GR	1883.10	255.00	1883.00	259.00	1883.00	262.00	1882.80	269.00	1882.80	274.00
GR	1882.70	277.00	1882.70	280.00	1882.50	287.00	1882.30	298.00	1882.20	305.00
GR	1882.00	314.00	1882.00	318.00	1881.90	324.00	1881.90	329.00	1881.80	338.00
GR	1881.80	342.00	1881.80	358.00	1881.80	367.00	1881.80	371.00	1881.80	379.00
GR	1881.80	386.00	1881.80	390.00	1881.90	392.00	1881.93	408.75	1881.95	425.50
GR	1881.98	442.25	1882.00	459.00	1882.20	475.00	1882.30	488.00	1882.40	493.00

GR 1882.60 502.00 1882.60 506.00 1882.70 510.00 1882.80 514.00 1882.90 523.00  
 GR 1882.90 526.00 1883.00 530.00 1883.00 535.00 1883.00 538.00 1883.10 540.00  
 GR 1883.10 543.00 1883.20 550.00 1883.20 556.00 1883.20 558.00 1883.20 564.00  
 GR 1883.20 566.00 1883.30 570.00 1883.30 573.00 1883.30 579.00 1883.30 584.00  
 GR 1883.30 593.00 1883.25 603.50 1883.20 614.00 1883.20 617.00 1883.20 623.00  
 GR 1883.20 626.00 1883.20 632.00 1883.30 636.00 1883.40 642.00 1883.40 648.00  
 GR 1883.50 653.00 1883.60 656.00 1883.70 661.00 1883.80 671.00 1884.00 687.00  
 GR 1883.90 690.00 1883.90 700.00 1883.85 712.50 1883.80 725.00 1883.80 730.00  
 GR 1883.80 734.00 1883.90 739.00 1883.90 746.00 1883.80 752.00 1883.70 759.00  
 GR 1883.70 763.00 1883.70 775.00 1883.70 781.00 1883.70 786.00 1883.60 800.00  
 X1 2000.00 91.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 5.00  
 GR 1884.30 237.00 1884.40 240.00 1884.40 246.00 1884.40 249.00 1884.40 255.00  
 GR 1884.40 261.00 1884.30 265.00 1884.30 271.00 1884.30 276.00 1884.20 288.00  
 GR 1884.20 293.00 1884.10 297.00 1884.10 301.00 1884.00 304.00 1883.90 308.00  
 GR 1883.90 312.00 1883.70 315.00 1883.60 317.00 1883.50 320.00 1883.40 323.00  
 GR 1883.40 326.00 1883.30 340.00 1883.30 342.00 1883.30 347.00 1883.30 354.00  
 GR 1883.40 358.00 1883.40 363.00 1883.40 367.00 1883.40 379.00 1883.40 382.00  
 GR 1883.30 385.00 1883.30 390.00 1883.20 397.00 1883.10 404.00 1883.00 409.00  
 GR 1882.90 413.00 1882.90 417.00 1882.90 423.00 1882.90 430.00 1883.00 431.00  
 GR 1883.00 435.00 1883.00 437.00 1882.90 440.00 1882.90 448.00 1882.90 453.00  
 GR 1882.90 455.00 1882.80 459.00 1882.80 463.00 1882.80 467.00 1882.90 472.00  
 GR 1883.00 474.00 1883.25 484.50 1883.50 495.00 1883.60 498.00 1883.60 500.00  
 GR 1883.60 503.00 1883.50 515.50 1883.40 528.00 1883.50 544.50 1883.60 561.00  
 GR 1883.60 567.00 1883.67 579.67 1883.73 592.33 1883.80 605.00 1884.00 619.00  
 GR 1884.20 633.00 1884.40 650.00 1884.40 658.00 1884.50 661.00 1884.50 664.00  
 GR 1884.40 671.00 1884.50 678.00 1884.60 689.00 1884.70 695.00 1884.70 699.00  
 GR 1884.80 704.00 1884.80 708.00 1884.90 711.00 1884.90 713.00 1885.00 718.00  
 GR 1885.00 724.00 1884.90 726.00 1884.90 741.00 1884.90 744.00 1884.90 746.00  
 GR 1885.00 751.00 1884.90 754.00 1884.90 757.00 1884.90 765.00 1884.90 769.00  
 GR 1884.90 775.00 1884.80 779.00 1884.80 783.00 1884.80 786.00 1884.70 789.00  
 GR 1884.60 797.00  
 X1 2100.00 63.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 14.00  
 GR 1885.50 224.00 1885.30 240.00 1885.30 242.00 1885.40 247.00 1885.40 251.00  
 GR 1885.40 255.00 1885.30 259.00 1885.30 264.00 1885.30 267.00 1885.20 269.00  
 GR 1885.20 271.00 1885.20 273.00 1885.10 276.00 1885.10 278.00 1885.00 280.00  
 GR 1884.90 282.00 1884.90 285.00 1884.80 290.00 1884.80 293.00 1884.70 297.00  
 GR 1884.60 302.00 1884.60 310.00 1884.60 315.00 1884.60 319.00 1884.57 330.33  
 GR 1884.53 341.67 1884.50 353.00 1884.40 358.00 1884.30 364.00 1884.20 371.00  
 GR 1884.15 383.00 1884.10 395.00 1884.10 407.00 1884.20 413.00 1884.20 416.00  
 GR 1884.20 425.00 1884.20 434.00 1884.20 447.00 1884.20 457.00 1884.20 462.00  
 GR 1884.00 470.00 1884.00 474.00 1883.90 478.00 1884.00 484.00 1884.05 495.50  
 GR 1884.10 507.00 1884.20 513.00 1884.10 521.00 1884.10 526.00 1884.10 532.00  
 GR 1884.00 542.00 1884.00 544.00 1884.10 549.00 1884.20 553.00 1884.30 562.00  
 GR 1884.30 575.00 1884.30 588.00 1884.50 601.00 1884.60 611.00 1884.80 616.00  
 GR 1885.00 625.00 1885.10 630.00 1885.10 634.00 1885.20 636.00 1885.20 640.00  
 GR 1885.30 643.00 1885.30 649.00 1885.30 653.00 1885.38 669.33 1885.46 685.67  
 GR 1885.53 702.00 1885.61 718.33 1885.69 734.67 1885.77 751.00 1885.84 767.33  
 GR 1885.92 783.67 1886.00 800.00  
 X1 2200.00 115.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 7.00  
 GR 1885.90 0.00 1885.90 4.00 1886.00 8.00 1886.00 11.00 1886.20 18.00  
 GR 1886.30 23.00 1886.30 26.00 1886.40 28.00 1886.40 31.00 1886.40 38.00  
 GR 1886.40 40.00 1886.40 51.00 1886.40 56.00 1886.40 65.00 1886.40 70.00  
 GR 1886.40 73.00 1886.30 77.00 1886.20 85.00 1886.30 87.00 1886.30 93.00  
 GR 1886.30 98.00 1886.20 110.00 1886.20 115.00 1886.30 120.00 1886.30 125.00  
 GR 1886.40 135.00 1886.30 144.00 1886.30 152.00 1886.30 157.00 1886.20 164.00  
 GR 1886.10 170.00 1886.00 177.00 1886.00 190.50 1886.00 204.00 1886.20 214.00  
 GR 1886.30 222.00 1886.30 226.00 1886.40 229.00 1886.50 239.00 1886.50 246.00  
 GR 1886.50 252.00 1886.50 261.00 1886.40 273.00 1886.40 277.00 1886.40 280.00  
 GR 1886.30 284.00 1886.30 287.00 1886.20 292.00 1886.10 295.00 1886.00 299.00

GR	1885.90	305.00	1885.70	310.00	1885.50	318.00	1885.40	333.50	1885.30	349.00
GR	1885.30	352.00	1885.30	357.00	1885.30	370.00	1885.30	373.00	1885.20	376.00
GR	1885.10	387.00	1885.10	400.00	1885.10	409.00	1885.20	412.00	1885.40	426.00
GR	1885.40	428.00	1885.40	441.00	1885.40	443.00	1885.30	446.00	1885.30	448.00
GR	1885.20	452.00	1885.10	456.00	1885.20	468.00	1885.20	472.00	1885.20	477.00
GR	1885.20	481.00	1885.10	484.00	1885.10	487.00	1885.00	490.00	1885.00	494.00
GR	1885.10	497.00	1885.10	499.00	1885.10	510.00	1885.20	514.00	1885.20	523.00
GR	1885.20	525.00	1885.30	527.00	1885.30	530.00	1885.20	533.00	1885.20	536.00
GR	1885.20	540.00	1885.20	542.00	1885.10	552.00	1885.20	568.50	1885.30	585.00
GR	1885.30	591.00	1885.40	599.00	1885.50	603.00	1885.50	612.00	1885.60	617.00
GR	1885.70	623.00	1885.70	626.00	1885.90	632.00	1886.00	640.00	1886.10	643.00
GR	1886.10	647.00	1886.20	658.00	1886.20	664.00	1886.20	670.00	1886.20	675.00
GR	1886.20	680.00	1886.10	687.00	1886.30	699.33	1886.50	711.67	1886.70	724.00
GR	1886.90	735.50	1887.10	747.00	1887.30	760.00	1887.60	777.00	1887.65	786.50
GR	1887.70	796.00	1888.20	800.00						
X1	2300.00	105.00	0.00	800.00	100.00	100.00	100.00	0.00	0.00	0.00
X3					12.00					
GR	1888.10	0.00	1888.05	9.50	1888.00	19.00	1887.90	24.00	1887.80	28.00
GR	1887.80	31.00	1887.80	33.00	1887.80	40.00	1887.80	49.00	1887.80	58.00
GR	1887.90	62.00	1887.80	65.00	1887.80	79.00	1887.90	85.00	1887.90	87.00
GR	1887.90	90.00	1887.90	95.00	1887.90	98.00	1888.00	103.00	1888.00	107.00
GR	1887.90	115.00	1887.80	123.00	1887.70	128.00	1887.60	131.00	1887.60	134.00
GR	1887.60	139.00	1887.60	144.00	1887.50	152.00	1887.50	155.00	1887.40	160.00
GR	1887.30	162.00	1887.25	175.50	1887.20	189.00	1887.30	199.00	1887.30	203.00
GR	1887.30	206.00	1887.30	210.00	1887.30	215.00	1887.40	218.00	1887.50	223.00
GR	1887.70	235.00	1887.90	246.00	1887.90	254.00	1888.00	263.00	1887.80	271.00
GR	1887.20	288.00	1887.00	293.00	1886.80	297.00	1886.70	300.00	1886.50	302.00
GR	1886.50	304.00	1886.30	308.00	1886.20	311.00	1886.10	315.00	1886.20	319.00
GR	1886.27	333.50	1886.35	348.00	1886.42	362.50	1886.50	377.00	1886.50	381.00
GR	1886.60	383.00	1886.60	387.00	1886.50	391.00	1886.50	397.00	1886.50	404.00
GR	1886.50	411.00	1886.40	414.00	1886.35	423.00	1886.30	432.00	1886.30	435.00
GR	1886.20	443.00	1886.10	446.00	1886.10	454.00	1886.10	457.00	1886.10	464.00
GR	1886.10	479.20	1886.10	494.40	1886.10	509.60	1886.10	524.80	1886.10	540.00
GR	1886.10	543.00	1886.05	553.00	1886.00	563.00	1886.10	569.00	1886.10	578.00
GR	1886.00	584.00	1886.00	591.00	1886.00	595.00	1886.10	599.00	1886.20	615.00
GR	1886.30	618.00	1886.30	621.00	1886.40	624.00	1886.40	627.00	1886.60	638.00
GR	1886.80	652.00	1886.90	662.00	1887.10	675.00	1887.20	683.00	1887.30	691.00
GR	1887.30	696.00	1887.40	698.00	1887.40	702.00	1887.40	706.00	1887.40	709.00
GR	1887.50	713.00	1887.60	716.00	1887.60	719.00	1887.60	724.00	1887.60	729.00
GR	1887.60	737.00	1887.70	744.00	1887.70	752.00	1887.85	765.50	1888.00	779.00
GR	1887.40	796.00	1887.40	798.00						
X1	2400.00	98.00	0.00	800.00	100.00	100.00	100.00	0.00	0.00	0.00
X3				9.00						
GR	1890.10	0.00	1890.20	4.00	1890.30	11.00	1890.40	18.00	1890.40	21.00
GR	1890.40	27.00	1890.30	37.00	1890.20	46.00	1890.20	48.00	1890.20	52.00
GR	1890.00	61.00	1889.90	69.00	1889.90	76.00	1889.80	82.00	1889.70	87.00
GR	1889.50	94.00	1889.30	102.00	1889.10	114.00	1889.10	121.00	1889.00	126.00
GR	1888.90	131.00	1888.90	134.00	1888.90	139.00	1888.80	143.00	1888.70	148.00
GR	1888.70	151.00	1888.70	153.00	1888.60	158.00	1888.50	160.00	1888.50	162.00
GR	1888.40	165.00	1888.50	167.00	1888.60	169.00	1888.60	172.00	1888.70	177.00
GR	1888.70	179.00	1888.80	182.00	1888.90	187.00	1888.90	191.00	1888.90	203.00
GR	1888.90	206.00	1889.00	208.00	1888.90	218.00	1888.80	228.00	1888.80	231.00
GR	1888.80	236.00	1888.70	240.00	1888.70	247.00	1888.60	251.00	1888.30	265.00
GR	1888.10	278.00	1887.80	282.00	1887.50	297.00	1887.50	304.00	1887.50	311.00
GR	1887.40	314.00	1887.40	320.00	1887.40	324.00	1887.40	329.00	1887.50	341.00
GR	1887.60	353.00	1887.60	355.00	1887.70	369.00	1887.70	373.00	1887.70	377.00
GR	1887.60	380.00	1887.60	382.00	1887.50	387.00	1887.50	391.00	1887.50	404.00
GR	1887.50	417.00	1887.50	421.00	1887.50	424.00	1887.40	429.00	1887.40	433.00
GR	1887.40	439.00	1887.30	442.00	1887.20	444.00	1887.10	447.00	1887.10	451.00
GR	1887.10	454.00	1887.10	464.00	1887.10	468.00	1887.10	481.00	1887.30	494.67
GR	1887.50	508.33	1887.70	522.00	1887.80	524.00	1887.80	532.00	1887.80	541.00
GR	1887.65	554.25	1887.50	567.50	1887.35	580.75	1887.20	594.00	1887.20	596.00

GR 1887.25 605.00 1887.30 614.00 1887.30 620.00 1887.40 628.00 1887.30 633.00  
 GR 1887.20 636.00 1887.30 638.00 1887.30 641.00 1887.40 643.00 1887.50 650.00  
 GR 1887.60 657.00 1888.50 670.00  
 X1 2500.00 100.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 13.00  
 GR 1891.70 0.00 1892.00 9.00 1892.20 14.00 1892.30 21.00 1892.40 25.00  
 GR 1892.40 31.00 1892.50 35.00 1892.60 39.00 1892.60 42.00 1892.60 46.00  
 GR 1892.60 51.00 1892.50 55.00 1892.30 57.00 1892.30 59.00 1892.30 61.00  
 GR 1892.30 64.00 1892.30 68.00 1892.40 71.00 1892.60 74.00 1892.70 78.00  
 GR 1892.70 84.00 1892.70 88.00 1892.60 92.00 1892.30 100.00 1892.00 109.00  
 GR 1891.70 115.00 1891.50 120.00 1891.00 133.00 1890.70 140.00 1890.60 142.00  
 GR 1890.40 150.00 1890.30 154.00 1890.10 159.00 1890.10 161.00 1890.10 177.00  
 GR 1890.10 193.00 1890.00 200.00 1889.80 210.00 1889.70 216.00 1889.60 221.00  
 GR 1889.35 233.00 1889.10 245.00 1889.10 249.00 1889.10 257.00 1889.10 262.00  
 GR 1889.00 265.00 1889.00 272.00 1888.90 275.00 1888.90 279.00 1888.80 282.00  
 GR 1888.80 284.00 1888.80 288.00 1888.70 291.00 1888.70 295.00 1888.70 298.00  
 GR 1888.70 303.00 1888.70 305.00 1888.80 310.00 1888.70 327.00 1888.60 332.00  
 GR 1888.60 341.00 1888.50 346.00 1888.50 348.00 1888.50 355.00 1888.40 358.00  
 GR 1888.40 360.00 1888.40 364.00 1888.30 366.00 1888.30 369.00 1888.30 372.00  
 GR 1888.40 375.00 1888.40 379.00 1888.50 387.00 1888.60 389.00 1888.60 399.00  
 GR 1888.70 401.00 1888.70 403.00 1888.70 406.00 1888.70 412.00 1888.70 415.00  
 GR 1888.70 418.00 1888.70 422.00 1888.60 424.00 1888.50 427.00 1888.50 430.00  
 GR 1888.40 436.00 1888.50 439.00 1888.50 450.00 1888.50 455.00 1888.50 459.00  
 GR 1888.20 464.00 1888.20 473.00 1888.00 482.00 1888.04 497.67 1888.08 513.33  
 GR 1888.12 529.00 1888.17 544.67 1888.21 560.33 1888.25 576.00 1888.29 591.67  
 GR 1888.33 607.33 1888.37 623.00 1888.42 638.67 1888.46 654.33 1888.50 670.00  
 GR 1888.50 672.00 1888.70 674.00 1888.80 677.00 1888.80 679.00 1888.80 682.00  
 GR 1888.80 684.00 1888.90 688.00 1888.80 693.00  
 X1 2600.00 155.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 6.00  
 GR 1893.70 0.00 1894.00 7.00 1894.40 19.00 1894.60 23.00 1894.80 28.00  
 GR 1894.90 35.00 1895.00 42.00 1895.20 45.00 1895.10 50.00 1895.10 59.00  
 GR 1895.20 61.00 1895.30 66.00 1895.30 68.00 1895.30 72.00 1895.30 75.00  
 GR 1895.20 79.00 1895.10 81.00 1894.90 86.00 1894.50 95.00 1894.00 105.00  
 GR 1893.00 120.00 1892.00 135.00 1891.70 149.00 1891.50 152.00 1891.40 158.00  
 GR 1891.30 165.00 1891.20 170.00 1891.20 174.00 1891.20 178.00 1891.10 184.00  
 GR 1891.10 187.00 1891.10 191.00 1891.00 195.00 1890.90 201.00 1890.80 206.00  
 GR 1890.70 216.00 1890.50 225.00 1890.50 228.00 1890.40 231.00 1890.40 233.00  
 GR 1890.30 235.00 1890.30 237.00 1890.20 239.00 1890.20 247.00 1890.20 250.00  
 GR 1890.20 255.00 1890.20 259.00 1890.20 263.00 1890.10 269.00 1890.10 271.00  
 GR 1890.10 278.00 1890.00 280.00 1890.10 283.00 1890.20 286.00 1890.30 289.00  
 GR 1890.20 293.00 1890.10 296.00 1890.00 301.00 1889.90 309.00 1889.80 313.00  
 GR 1889.80 319.00 1889.70 322.00 1889.70 324.00 1889.60 328.00 1889.60 334.00  
 GR 1889.60 338.00 1889.50 340.00 1889.40 342.00 1889.40 344.00 1889.40 347.00  
 GR 1889.30 349.00 1889.30 353.00 1889.30 359.00 1889.30 366.00 1889.40 368.00  
 GR 1889.40 371.00 1889.50 373.00 1889.50 377.00 1889.60 383.00 1889.60 389.00  
 GR 1889.60 391.00 1889.60 397.00 1889.60 400.00 1889.70 406.00 1889.70 408.00  
 GR 1889.70 413.00 1889.70 415.00 1889.70 419.00 1889.70 421.00 1889.60 424.00  
 GR 1889.60 426.00 1889.60 428.00 1889.50 430.00 1889.50 432.00 1889.30 434.00  
 GR 1889.30 438.00 1889.30 440.00 1889.30 444.00 1889.20 450.00 1889.20 453.00  
 GR 1889.10 456.00 1889.10 459.00 1889.10 461.00 1889.10 465.00 1889.10 468.00  
 GR 1888.80 483.00 1888.60 489.00 1888.60 493.00 1888.50 496.00 1888.40 499.00  
 GR 1888.40 501.00 1888.30 503.00 1888.30 505.00 1888.30 507.00 1888.20 509.00  
 GR 1888.20 512.00 1888.30 517.00 1888.30 519.00 1888.20 525.00 1888.20 527.00  
 GR 1888.30 531.00 1888.60 535.00 1888.70 537.00 1888.80 541.00 1888.90 543.00  
 GR 1889.00 546.00 1889.00 547.00 1889.10 552.00 1889.10 558.00 1889.00 560.00  
 GR 1888.90 564.00 1888.90 567.00 1888.80 570.00 1888.80 575.00 1888.90 579.00  
 GR 1888.70 593.00 1888.40 602.00 1888.40 604.00 1888.30 606.00 1888.30 610.00  
 GR 1888.40 613.00 1888.60 619.00 1888.60 622.00 1888.60 624.00 1888.80 638.00  
 GR 1888.80 641.00 1889.10 656.00 1889.20 660.00 1889.40 663.00 1889.60 674.50  
 GR 1889.80 686.00 1889.80 690.00 1889.80 704.17 1889.80 718.33 1889.80 732.50  
 GR 1889.80 746.67 1889.80 760.83 1889.80 775.00 1889.80 782.00 1889.70 785.00

GR 1889.60 787.00  
 X1 2700.00 90.00 0.00 799.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 9.00  
 GR 1897.60 0.00 1897.70 4.00 1897.80 14.00 1897.80 23.00 1897.90 30.00  
 GR 1897.80 35.00 1898.00 51.00 1896.80 64.00 1895.95 73.50 1895.10 83.00  
 GR 1894.30 97.00 1893.80 109.00 1893.70 113.00 1893.20 128.00 1893.10 132.00  
 GR 1893.00 139.00 1892.50 155.00 1892.25 171.00 1892.00 187.00 1891.90 201.50  
 GR 1891.80 216.00 1891.80 226.00 1891.90 233.00 1891.90 239.00 1891.90 248.00  
 GR 1892.00 254.00 1892.00 255.00 1892.10 261.00 1892.20 269.00 1892.10 274.00  
 GR 1892.10 281.00 1891.80 292.00 1891.80 294.00 1891.60 299.00 1891.40 302.00  
 GR 1891.30 305.00 1891.10 309.00 1891.00 314.00 1890.90 318.00 1890.90 323.00  
 GR 1890.80 331.00 1890.70 335.00 1890.60 337.00 1890.50 339.00 1890.40 342.00  
 GR 1890.50 344.00 1890.50 346.00 1890.50 348.00 1890.47 361.50 1890.45 375.00  
 GR 1890.42 388.50 1890.40 402.00 1890.30 412.00 1890.20 419.00 1890.10 428.00  
 GR 1890.10 431.00 1890.00 440.00 1889.90 446.00 1889.90 450.00 1890.00 452.00  
 GR 1890.00 459.00 1890.10 464.00 1890.10 470.00 1890.10 475.00 1890.10 478.00  
 GR 1890.20 491.00 1890.20 502.00 1890.20 507.00 1890.20 512.00 1890.10 519.00  
 GR 1890.00 526.00 1889.90 530.00 1889.90 533.00 1889.80 535.00 1889.87 549.00  
 GR 1889.93 563.00 1890.00 577.00 1889.80 581.00 1889.80 592.00 1889.80 598.00  
 GR 1889.70 604.00 1889.70 611.00 1889.70 615.00 1889.80 617.00 1889.90 631.50  
 GR 1890.00 646.00 1890.10 653.00 1890.10 661.00 1890.10 666.00 1890.20 670.00  
 GR 1890.10 673.00 1890.10 680.00 1890.10 688.00 1890.10 694.00 1890.10 697.00  
 GR 1890.10 703.00 1890.10 713.00 1890.00 719.00 1891.00 730.00  
 X1 2800.00 165.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 4.00  
 GR 1901.20 0.00 1901.20 5.00 1901.30 9.00 1901.30 11.00 1901.30 15.00  
 GR 1901.20 17.00 1900.90 22.00 1900.70 27.00 1900.20 35.00 1899.50 42.00  
 GR 1898.00 55.00 1897.00 66.00 1896.00 77.00 1895.65 87.00 1895.30 97.00  
 GR 1894.80 108.00 1894.20 125.00 1893.90 133.00 1893.80 135.00 1893.70 143.00  
 GR 1893.60 146.00 1893.60 149.00 1893.40 154.00 1893.40 156.00 1893.30 160.00  
 GR 1893.20 163.00 1893.20 167.00 1893.10 170.00 1893.00 172.00 1892.90 174.00  
 GR 1893.00 180.00 1893.00 183.00 1893.10 185.00 1893.10 188.00 1893.20 190.00  
 GR 1893.30 193.00 1893.40 196.00 1893.60 202.00 1893.60 209.00 1893.60 211.00  
 GR 1893.60 213.00 1893.70 217.00 1893.70 219.00 1893.70 223.00 1893.60 225.00  
 GR 1893.60 227.00 1893.50 230.00 1893.50 233.00 1893.40 235.00 1893.30 238.00  
 GR 1893.20 242.00 1892.90 248.00 1892.80 253.00 1892.80 257.00 1892.60 262.00  
 GR 1892.50 267.00 1892.40 270.00 1892.40 274.00 1892.30 276.00 1892.20 278.00  
 GR 1892.20 280.00 1892.20 283.00 1892.30 291.00 1892.30 297.00 1892.40 302.00  
 GR 1892.30 305.00 1892.20 308.00 1892.00 311.00 1891.80 323.00 1891.70 330.00  
 GR 1891.60 337.00 1891.50 348.00 1891.40 354.00 1891.30 358.00 1891.30 362.00  
 GR 1891.30 372.00 1891.30 382.00 1891.30 386.00 1891.50 395.00 1891.50 400.00  
 GR 1891.50 404.00 1891.40 406.00 1891.40 409.00 1891.30 412.00 1891.30 415.00  
 GR 1891.20 418.00 1891.20 420.00 1891.15 436.50 1891.10 453.00 1891.20 462.00  
 GR 1891.30 464.00 1891.30 467.00 1891.30 470.00 1891.40 475.00 1891.40 478.00  
 GR 1891.40 484.00 1891.40 487.00 1891.40 492.00 1891.50 499.00 1891.50 503.00  
 GR 1891.40 505.00 1891.40 507.00 1891.40 510.00 1891.30 512.00 1891.30 515.00  
 GR 1891.20 517.00 1891.20 520.00 1891.20 522.00 1891.10 524.00 1891.00 527.00  
 GR 1890.90 532.00 1890.90 537.00 1890.80 540.00 1890.80 546.00 1890.70 549.00  
 GR 1890.80 558.00 1890.80 562.00 1890.90 565.00 1891.00 569.00 1890.80 575.00  
 GR 1890.70 581.00 1890.60 583.00 1890.60 585.00 1890.50 590.00 1890.50 593.00  
 GR 1890.60 595.00 1890.60 597.00 1890.60 599.00 1890.70 601.00 1890.80 603.00  
 GR 1890.80 605.00 1890.90 607.00 1890.90 609.00 1890.90 611.00 1891.00 615.00  
 GR 1891.10 629.00 1891.20 634.00 1891.40 642.00 1891.30 647.00 1891.40 652.00  
 GR 1891.40 654.00 1891.40 660.00 1891.40 664.00 1891.30 667.00 1891.30 671.00  
 GR 1891.40 673.00 1891.40 676.00 1891.50 680.00 1891.50 682.00 1891.60 684.00  
 GR 1891.60 688.00 1891.60 691.00 1891.60 697.00 1891.60 699.00 1891.60 703.00  
 GR 1891.60 707.00 1891.50 709.00 1891.50 711.00 1891.40 716.00 1891.40 720.00  
 GR 1891.40 723.00 1891.40 725.00 1891.40 730.00 1891.40 737.00 1891.50 741.00  
 GR 1891.70 745.00 1891.60 747.00 1891.60 751.00 1891.60 753.00  
 X1 2900.00 125.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 13.00  
 GR 1901.10 0.00 1900.30 8.00 1900.00 11.00 1899.70 18.00 1899.20 30.00

GR 1898.90 37.00 1898.10 49.00 1897.90 54.00 1897.70 57.00 1897.14 72.00  
 GR 1896.58 87.00 1896.02 102.00 1895.46 117.00 1894.90 132.00 1894.60 145.00  
 GR 1894.40 152.00 1894.20 156.00 1894.20 158.00 1894.20 160.00 1894.10 162.00  
 GR 1894.10 169.00 1894.20 171.00 1894.30 174.00 1894.30 179.00 1894.40 181.00  
 GR 1894.50 184.00 1894.60 187.00 1894.60 189.00 1894.80 191.00 1894.80 199.00  
 GR 1894.80 203.00 1894.80 207.00 1894.70 211.00 1894.60 214.00 1894.50 217.00  
 GR 1894.40 222.00 1894.30 226.00 1894.30 231.00 1894.10 238.00 1894.00 248.00  
 GR 1893.90 258.00 1893.93 269.33 1893.97 280.67 1894.00 292.00 1893.70 296.00  
 GR 1893.10 308.00 1893.00 310.00 1892.80 314.00 1892.50 316.00 1892.40 318.00  
 GR 1892.90 321.00 1893.00 325.00 1893.10 328.00 1893.10 331.00 1893.20 337.00  
 GR 1893.20 339.00 1893.10 342.00 1893.10 346.00 1893.00 350.00 1892.80 357.00  
 GR 1892.80 361.00 1892.80 363.00 1892.70 367.00 1892.50 380.00 1892.30 390.00  
 GR 1892.10 400.00 1892.07 413.25 1892.05 426.50 1892.02 439.75 1892.00 453.00  
 GR 1892.10 456.00 1892.20 459.00 1892.30 466.00 1892.20 470.00 1892.10 474.00  
 GR 1892.20 477.00 1892.40 479.00 1892.50 481.00 1892.50 484.00 1892.50 490.00  
 GR 1892.60 493.00 1892.60 499.00 1892.50 503.00 1892.50 508.00 1892.40 518.00  
 GR 1892.40 520.00 1892.30 524.00 1892.30 527.00 1892.20 530.00 1892.00 536.00  
 GR 1892.00 543.00 1892.00 554.67 1892.00 566.33 1892.00 578.00 1891.90 582.00  
 GR 1891.80 585.00 1891.70 587.00 1891.70 599.00 1891.80 603.00 1891.80 605.00  
 GR 1891.90 608.00 1891.90 615.00 1892.00 619.00 1892.00 622.00 1892.10 628.00  
 GR 1892.20 636.00 1892.30 641.00 1892.40 646.00 1892.50 649.00 1892.50 652.00  
 GR 1892.50 654.00 1892.60 656.00 1892.60 660.00 1892.70 664.00 1892.70 667.00  
 GR 1892.60 671.00 1892.60 675.00 1892.70 678.00 1892.70 686.00 1892.70 689.00  
 GR 1892.60 691.00 1892.60 694.00 1892.70 696.00 1892.80 700.00 1892.70 707.00  
 GR 1892.70 713.00 1892.70 717.00 1892.80 721.00 1892.80 732.00 1892.80 736.00  
 GR 1892.70 738.00 1892.70 742.00 1892.70 746.00 1892.60 750.00 1892.60 755.00  
 GR 1892.60 761.00 1892.50 764.00 1892.50 767.00

X1 3000.00 105.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 11.00

GR 1900.80 0.00 1900.00 12.00 1899.33 25.33 1898.67 38.67 1898.00 52.00  
 GR 1897.50 69.00 1896.90 84.00 1896.55 94.50 1896.20 105.00 1896.00 112.00  
 GR 1895.90 119.00 1895.80 124.00 1895.70 129.00 1895.60 132.00 1895.50 135.00  
 GR 1895.50 137.00 1895.50 144.00 1895.60 148.00 1895.70 150.00 1895.80 156.00  
 GR 1895.80 159.00 1895.80 165.00 1895.90 172.00 1895.90 178.00 1895.80 191.00  
 GR 1895.80 194.00 1895.70 208.00 1895.60 210.00 1895.50 218.00 1895.40 222.00  
 GR 1895.40 235.00 1895.40 248.00 1895.40 253.00 1895.40 255.00 1895.50 257.00  
 GR 1895.30 269.00 1895.30 272.00 1895.20 275.00 1895.00 280.00 1894.90 282.00  
 GR 1894.70 287.00 1894.50 292.00 1894.00 304.00 1893.80 316.00 1893.60 328.00  
 GR 1893.40 342.00 1893.20 355.00 1893.20 359.00 1893.10 367.00 1893.00 375.00  
 GR 1893.00 380.00 1893.00 385.00 1893.00 388.00 1892.90 393.00 1892.90 398.00  
 GR 1892.80 400.00 1892.80 408.00 1892.80 411.00 1892.70 417.00 1892.70 420.00  
 GR 1892.70 422.00 1892.70 426.00 1892.70 431.00 1892.70 433.00 1892.70 436.00  
 GR 1892.80 439.00 1892.80 442.00 1892.80 444.00 1892.90 447.00 1892.80 449.00  
 GR 1893.10 465.00 1893.20 469.00 1893.30 474.00 1893.30 477.00 1893.30 480.00  
 GR 1893.40 483.00 1893.40 485.00 1893.50 488.00 1893.40 490.00 1893.50 493.00  
 GR 1893.60 496.00 1893.60 500.00 1893.50 504.00 1893.50 506.00 1893.40 509.00  
 GR 1893.40 513.00 1893.30 519.00 1893.10 534.00 1893.13 545.33 1893.17 556.67  
 GR 1893.20 568.00 1893.20 579.00 1893.10 581.00 1893.10 584.00 1893.00 588.00  
 GR 1893.10 599.00 1893.30 604.00 1893.30 607.00 1893.35 620.75 1893.40 634.50  
 GR 1893.45 648.25 1893.50 662.00 1893.50 665.00 1893.60 667.00 1893.60 669.00  
 GR 1893.60 672.00 1893.65 682.00 1893.70 692.00 1893.70 695.00 1893.70 698.00  
 GR 1893.80 700.00 1893.80 703.00 1893.80 706.00 1893.80 710.00 1893.80 715.00  
 GR 1893.80 719.00

X1 3100.00 125.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 4.00

GR 1900.40 0.00 1900.00 8.00 1899.60 20.00 1899.30 30.00 1899.20 34.00  
 GR 1899.00 41.00 1898.80 47.00 1898.60 55.00 1898.20 69.00 1898.00 77.00  
 GR 1897.70 86.00 1897.60 94.00 1897.50 97.00 1897.40 102.00 1897.30 105.00  
 GR 1897.20 108.00 1897.20 110.00 1897.10 114.00 1897.10 116.00 1897.00 119.00  
 GR 1897.00 122.00 1897.00 124.00 1897.10 126.00 1897.20 129.00 1897.20 131.00  
 GR 1897.20 139.00 1897.20 146.00 1897.10 151.00 1897.10 157.00 1897.10 160.00  
 GR 1897.00 163.00 1897.00 166.00 1896.90 171.00 1896.90 175.00 1896.80 177.00

GR 1896.80 180.00 1896.80 184.00 1896.70 187.00 1896.70 190.00 1896.70 193.00  
 GR 1896.60 197.00 1896.70 204.00 1896.70 212.00 1896.70 214.00 1896.80 217.00  
 GR 1896.80 221.00 1896.80 227.00 1896.80 233.00 1896.70 239.00 1896.70 243.00  
 GR 1896.60 254.00 1896.50 261.00 1896.40 271.00 1896.20 278.00 1896.00 284.00  
 GR 1895.90 289.00 1895.60 299.50 1895.30 310.00 1895.00 327.00 1894.70 339.00  
 GR 1894.60 343.00 1894.60 348.00 1894.50 351.00 1894.40 362.00 1894.30 368.00  
 GR 1894.10 379.00 1894.00 388.00 1893.90 395.00 1893.90 402.00 1893.90 408.00  
 GR 1893.90 410.00 1893.80 412.00 1893.80 418.00 1893.80 426.00 1893.80 431.00  
 GR 1893.70 437.00 1893.80 440.00 1893.80 445.00 1894.00 453.00 1894.00 458.00  
 GR 1894.10 464.00 1894.20 466.00 1894.30 470.00 1894.30 472.00 1894.30 475.00  
 GR 1894.20 478.00 1894.20 483.00 1894.20 486.00 1894.10 490.00 1894.10 493.00  
 GR 1894.05 502.00 1894.00 511.00 1894.10 513.00 1894.15 522.00 1894.20 531.00  
 GR 1894.10 541.00 1894.10 545.00 1894.05 554.00 1894.00 563.00 1894.10 567.00  
 GR 1894.20 572.00 1894.30 577.00 1894.40 582.00 1894.40 588.00 1894.40 594.00  
 GR 1894.30 597.00 1894.20 600.00 1894.10 604.00 1894.10 606.00 1894.20 609.00  
 GR 1894.30 612.00 1894.30 621.00 1894.20 624.00 1894.20 628.00 1894.20 635.00  
 GR 1894.10 646.00 1894.10 651.00 1894.20 656.00 1894.30 658.00 1894.40 662.00  
 GR 1894.40 666.00 1894.50 668.00 1894.60 672.00 1894.60 677.00 1894.60 680.00  
 GR 1894.60 689.00 1894.60 693.00 1894.70 695.00 1894.70 701.00

X1 3200.00 142.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00

X3 5.00

GR 1901.80 0.00 1901.10 17.00 1900.70 28.00 1900.30 36.00 1899.90 50.00  
 GR 1899.70 58.00 1899.70 60.00 1899.60 62.00 1899.40 71.00 1899.20 75.00  
 GR 1899.10 82.00 1899.00 88.00 1898.90 92.00 1898.90 95.00 1898.80 101.00  
 GR 1898.70 105.00 1898.60 108.00 1898.40 116.00 1898.20 123.00 1898.20 127.00  
 GR 1898.00 137.00 1897.90 147.00 1897.80 162.00 1897.70 177.00 1897.60 192.00  
 GR 1897.35 204.00 1897.10 216.00 1896.90 226.00 1896.80 232.00 1896.70 246.00  
 GR 1896.70 248.00 1896.00 264.00 1896.20 273.00 1896.40 285.00 1896.40 297.00  
 GR 1896.40 302.00 1896.30 309.00 1896.00 314.00 1895.90 318.00 1895.80 332.00  
 GR 1895.70 334.00 1895.60 342.00 1895.50 350.00 1895.40 356.00 1895.15 372.50  
 GR 1894.90 389.00 1894.90 394.00 1894.80 398.00 1894.80 400.00 1894.70 402.00  
 GR 1894.70 405.00 1894.70 408.00 1894.60 411.00 1894.60 413.00 1894.60 417.00  
 GR 1894.60 423.00 1894.60 429.00 1894.70 434.00 1894.80 436.00 1894.90 444.00  
 GR 1895.00 446.00 1895.10 450.00 1895.10 453.00 1895.10 456.00 1895.10 460.00  
 GR 1895.10 464.00 1895.20 467.00 1895.30 470.00 1895.40 472.00 1895.40 474.00  
 GR 1895.40 477.00 1895.50 480.00 1895.50 482.00 1895.50 485.00 1895.50 488.00  
 GR 1895.50 490.00 1895.40 495.00 1895.50 499.00 1895.50 504.00 1895.50 508.00  
 GR 1895.40 511.00 1895.40 516.00 1895.30 519.00 1895.30 523.00 1895.20 526.00  
 GR 1895.20 529.00 1895.10 533.00 1895.10 535.00 1895.00 538.00 1894.90 543.00  
 GR 1894.90 547.00 1894.90 550.00 1894.90 557.00 1895.00 560.00 1895.00 564.00  
 GR 1894.90 580.00 1895.00 583.00 1895.00 585.00 1895.00 589.00 1895.10 592.00  
 GR 1895.10 595.00 1895.10 597.00 1895.20 599.00 1895.20 604.00 1895.20 606.00  
 GR 1895.30 608.00 1895.30 610.00 1895.30 612.00 1895.40 616.00 1895.30 618.00  
 GR 1895.30 620.00 1895.30 622.00 1895.30 624.00 1895.30 628.00 1895.30 633.00  
 GR 1895.20 641.00 1895.20 650.00 1895.20 655.00 1895.20 658.00 1895.20 664.00  
 GR 1895.30 667.00 1895.30 669.00 1895.40 671.00 1895.40 673.00 1895.40 676.00  
 GR 1895.50 679.00 1895.40 682.00 1895.50 684.00 1895.50 688.00 1895.40 691.00  
 GR 1895.40 693.00 1895.40 695.00 1895.40 697.00 1895.30 699.00 1895.30 702.00  
 GR 1895.20 706.00 1895.10 708.00 1895.10 712.00 1895.00 715.00 1895.00 719.00  
 GR 1894.95 735.00 1894.90 751.00 1894.80 756.00 1894.70 760.00 1894.50 767.00  
 GR 1894.40 772.00 1894.10 780.00

X1 3300.00 142.00 0.00 799.00 100.00 100.00 100.00 0.00 0.00 0.00

X3 18.00

GR 1901.90 0.00 1901.80 4.00 1901.50 13.00 1901.30 20.00 1901.20 24.00  
 GR 1901.20 27.00 1901.20 29.00 1901.10 31.00 1901.10 32.00 1901.10 33.00  
 GR 1901.10 34.00 1901.10 36.00 1901.00 37.00 1901.00 39.00 1900.90 41.00  
 GR 1900.90 43.00 1900.70 50.00 1900.60 53.00 1900.30 62.00 1900.30 65.00  
 GR 1900.10 74.00 1900.00 76.00 1899.90 83.00 1899.70 90.00 1899.70 92.00  
 GR 1899.60 95.00 1899.60 98.00 1899.50 109.00 1899.50 110.00 1899.50 111.00  
 GR 1899.50 112.00 1899.40 114.00 1899.40 115.00 1899.40 117.00 1899.30 120.00  
 GR 1899.20 126.00 1899.20 128.00 1899.20 130.00 1899.10 135.00 1899.10 137.00  
 GR 1899.00 142.00 1899.00 144.00 1898.90 159.00 1898.90 163.00 1898.90 164.00

GR	1898.80	170.00	1898.70	176.00	1898.60	183.00	1898.50	186.00	1898.40	189.00
GR	1898.20	195.00	1898.10	200.00	1898.05	209.00	1898.00	218.00	1897.80	225.00
GR	1897.80	229.00	1897.80	232.00	1897.80	236.00	1897.80	237.00	1897.90	239.00
GR	1897.90	240.00	1898.00	241.00	1898.10	244.00	1898.10	246.00	1898.20	249.00
GR	1898.20	250.00	1898.20	252.00	1898.20	253.00	1898.20	258.00	1898.30	260.00
GR	1898.30	267.00	1898.20	276.00	1898.10	288.50	1898.00	301.00	1897.70	307.00
GR	1897.60	311.00	1897.10	323.00	1896.55	335.50	1896.00	348.00	1895.90	350.00
GR	1895.90	352.00	1895.80	355.00	1895.80	356.00	1895.80	359.00	1895.80	364.00
GR	1895.70	366.00	1895.70	370.00	1895.70	374.00	1895.60	377.00	1895.60	379.00
GR	1895.60	380.00	1895.50	382.00	1895.50	385.00	1895.50	387.00	1895.50	390.00
GR	1895.50	392.00	1895.50	395.00	1895.50	397.00	1895.50	398.00	1895.50	399.00
GR	1895.50	407.00	1895.50	410.00	1895.50	422.00	1895.60	424.00	1895.70	428.00
GR	1895.80	429.00	1895.80	430.00	1895.80	433.00	1895.80	435.00	1895.90	438.00
GR	1895.90	440.00	1895.90	443.00	1895.95	457.50	1896.00	472.00	1896.10	486.67
GR	1896.20	501.33	1896.30	516.00	1896.20	519.00	1896.20	521.00	1896.10	526.00
GR	1896.10	529.00	1896.10	530.00	1896.10	533.00	1896.09	548.30	1896.08	563.60
GR	1896.07	578.90	1896.06	594.20	1896.05	609.50	1896.04	624.80	1896.03	640.10
GR	1896.02	655.40	1896.01	670.70	1896.00	686.00	1896.00	687.00	1895.90	689.00
GR	1895.80	692.00	1895.60	695.00	1895.40	697.00	1895.30	699.00	1895.30	700.00
GR	1895.10	701.00	1895.00	702.00	1894.90	703.00	1894.90	715.00	1894.90	718.00
GR	1895.00	719.00	1895.20	728.00	1895.40	737.00	1895.50	738.00	1895.50	739.00
GR	1895.50	740.00	1895.50	741.00	1895.67	754.33	1895.83	767.67	1896.00	781.00
GR	1895.70	785.00	1896.00	789.00	1896.50	792.00	1896.60	793.00	1898.10	799.00
X1	3400.00	99.00	0.00	800.00	100.00	100.00	100.00	0.00	0.00	0.00
X3					18.00					
GR	1903.00	0.00	1902.80	5.00	1902.80	8.00	1902.60	17.00	1902.60	19.00
GR	1902.40	26.00	1902.40	30.00	1902.20	37.00	1902.00	48.00	1901.80	53.00
GR	1901.70	60.00	1901.70	64.00	1901.60	66.00	1901.60	68.00	1901.50	72.00
GR	1901.40	78.00	1901.20	85.00	1901.20	90.00	1901.00	98.00	1900.70	113.00
GR	1900.45	122.00	1900.20	131.00	1900.20	134.00	1900.10	136.00	1900.05	145.50
GR	1900.00	155.00	1899.80	164.00	1899.60	173.00	1899.60	179.00	1899.50	181.00
GR	1899.50	184.00	1899.40	188.00	1899.40	190.00	1899.30	196.00	1899.30	200.00
GR	1899.20	205.00	1899.30	220.00	1899.30	222.00	1899.40	227.00	1899.40	229.00
GR	1899.40	233.00	1899.40	237.00	1899.40	240.00	1899.50	242.00	1899.50	244.00
GR	1899.50	248.00	1899.40	258.00	1899.30	261.00	1899.30	265.00	1899.20	268.00
GR	1899.20	270.00	1899.10	274.00	1899.00	277.00	1898.90	285.00	1898.80	289.00
GR	1898.45	303.83	1898.10	318.67	1897.75	333.50	1897.40	348.33	1897.05	363.17
GR	1896.70	378.00	1896.50	384.00	1896.40	392.00	1896.30	396.00	1896.20	400.00
GR	1896.10	402.00	1896.10	404.00	1896.10	411.00	1896.10	413.00	1896.20	416.00
GR	1896.30	421.00	1896.55	432.00	1896.80	443.00	1896.80	445.00	1896.90	451.00
GR	1897.00	455.00	1897.00	459.00	1897.10	461.00	1897.20	466.00	1897.20	468.00
GR	1897.20	472.00	1897.30	476.00	1897.30	482.00	1897.30	484.00	1897.40	501.00
GR	1897.30	504.00	1897.10	520.50	1896.90	537.00	1896.80	540.00	1896.60	548.00
GR	1896.50	551.00	1896.43	566.43	1896.36	581.86	1896.29	597.29	1896.21	612.71
GR	1896.14	628.14	1896.07	643.57	1896.00	659.00	1896.00	670.00	1896.00	684.00
GR	1896.20	691.00	1896.30	698.00	1896.40	703.00	1896.40	708.00	1896.50	712.00
GR	1896.50	718.00	1896.50	722.00	1896.50	727.00	1896.40	729.00	1896.30	733.00
GR	1896.15	744.50	1896.00	756.00	1896.75	770.00	1897.50	784.00	1897.70	787.00
GR	1898.00	793.00	1898.80	799.00						
X1	3500.00	108.00	0.00	800.00	100.00	100.00	100.00	0.00	0.00	0.00
X3					11.00					
GR	1904.50	0.00	1904.25	12.00	1904.00	24.00	1903.70	35.00	1903.40	46.00
GR	1903.30	53.00	1903.20	59.00	1903.00	64.00	1902.90	71.00	1902.70	80.00
GR	1902.60	88.00	1902.40	95.00	1902.20	106.00	1901.90	116.00	1901.80	125.00
GR	1901.50	139.00	1901.30	152.00	1901.10	159.00	1901.10	163.00	1901.00	167.00
GR	1900.90	172.00	1900.90	175.00	1900.80	179.00	1900.70	184.00	1900.60	187.00
GR	1900.60	190.00	1900.60	193.00	1900.50	195.00	1900.60	198.00	1900.50	211.33
GR	1900.40	224.67	1900.30	238.00	1900.30	244.00	1900.10	257.00	1899.90	271.00
GR	1899.60	282.00	1899.20	293.00	1899.00	297.00	1899.00	303.00	1898.90	312.00
GR	1898.80	317.00	1898.55	327.00	1898.30	337.00	1898.00	349.00	1897.80	358.00
GR	1897.70	365.00	1897.70	368.00	1897.60	372.00	1897.50	376.00	1897.50	382.00
GR	1897.50	388.00	1897.40	390.00	1897.30	395.00	1897.30	400.00	1897.40	408.00

GR	1897.50	411.00	1897.60	415.00	1897.60	417.00	1897.70	424.00	1897.70	430.00
GR	1897.80	438.00	1897.70	441.00	1897.70	445.00	1897.70	450.00	1897.80	453.00
GR	1897.80	456.00	1897.90	460.00	1898.10	464.00	1898.20	469.00	1898.20	478.00
GR	1898.30	481.00	1898.30	489.00	1898.30	493.00	1898.30	499.00	1898.20	505.00
GR	1898.20	511.00	1898.20	517.00	1898.10	522.00	1898.00	525.00	1897.80	531.00
GR	1897.60	537.00	1897.40	540.00	1897.30	544.00	1897.20	547.00	1897.10	550.00
GR	1896.80	553.00	1896.80	555.00	1896.70	557.00	1896.70	559.00	1896.70	576.00
GR	1896.70	578.00	1896.70	580.00	1896.80	582.00	1896.80	585.00	1896.80	587.00
GR	1896.80	591.00	1896.80	595.00	1896.80	598.00	1897.10	611.00	1897.30	622.00
GR	1897.40	630.00	1897.50	645.00	1897.60	660.00	1897.60	667.00	1897.50	669.00
GR	1897.43	681.33	1897.37	693.67	1897.30	706.00	1897.30	713.00	1897.40	719.00
GR	1897.50	726.00	1897.60	732.00	1897.70	738.00	1897.70	745.00	1897.80	760.67
GR	1897.90	776.33	1898.00	792.00	1898.50	803.50	1899.00	815.00		
X1	3600.00	118.00	0.00	800.00	100.00	100.00	100.00	0.00	0.00	0.00
X3					13.00					
GR	1905.90	0.00	1905.80	8.00	1905.60	16.00	1905.50	20.00	1905.50	23.00
GR	1905.60	27.00	1905.50	30.00	1905.30	36.00	1905.20	39.00	1905.10	45.00
GR	1904.80	54.00	1904.60	57.00	1904.50	60.00	1904.40	67.00	1904.30	70.00
GR	1904.00	83.00	1903.80	91.00	1903.60	99.00	1903.50	103.00	1903.40	106.00
GR	1903.30	112.00	1903.00	121.00	1902.90	127.00	1902.80	133.00	1902.60	141.00
GR	1902.50	144.00	1902.40	150.00	1902.20	157.00	1902.00	165.00	1901.80	178.00
GR	1901.60	193.00	1901.40	207.00	1901.20	215.00	1901.10	220.00	1901.10	227.00
GR	1901.10	234.00	1901.10	236.00	1901.00	239.00	1901.00	240.00	1900.90	244.00
GR	1900.80	252.00	1900.70	255.00	1900.70	258.00	1900.60	260.00	1900.60	262.00
GR	1900.60	266.00	1900.50	270.00	1900.50	273.00	1900.40	278.00	1900.10	293.00
GR	1900.07	309.00	1900.03	325.00	1900.00	341.00	1899.50	356.00	1899.20	363.00
GR	1899.10	366.00	1898.90	369.00	1898.90	371.00	1898.80	373.00	1898.70	375.00
GR	1898.70	379.00	1898.70	382.00	1898.60	384.00	1898.60	388.00	1898.50	390.00
GR	1898.50	392.00	1898.50	395.00	1898.50	405.00	1898.50	407.00	1898.60	412.00
GR	1898.60	415.00	1898.60	417.00	1898.70	420.00	1898.70	423.00	1898.80	427.00
GR	1898.80	429.00	1898.90	432.00	1899.00	436.00	1899.10	440.00	1899.10	443.00
GR	1899.10	445.00	1899.20	449.00	1899.20	452.00	1899.20	457.00	1899.20	469.00
GR	1899.20	473.00	1899.20	476.00	1899.30	479.00	1899.40	482.00	1899.40	488.00
GR	1899.40	490.00	1899.40	496.00	1899.40	498.00	1899.30	501.00	1899.30	503.00
GR	1899.20	505.00	1899.20	508.00	1899.10	510.00	1899.10	513.00	1899.00	516.00
GR	1898.80	521.00	1898.70	526.00	1898.70	528.00	1898.60	533.00	1898.40	542.00
GR	1898.40	544.00	1898.30	547.00	1898.20	551.00	1898.20	553.00	1898.18	568.78
GR	1898.16	584.56	1898.13	600.33	1898.11	616.11	1898.09	631.89	1898.07	647.67
GR	1898.04	663.44	1898.02	679.22	1898.00	695.00	1898.45	711.25	1898.90	727.50
GR	1899.35	743.75	1899.80	760.00	1900.00	767.00	1900.50	772.00	1901.00	776.00
GR	1901.20	782.00	1901.30	785.00	1901.30	788.00	1901.30	794.00	1901.30	796.00
GR	1901.20	799.00								
X1	3700.00	89.00	0.00	800.00	100.00	100.00	100.00	0.00	0.00	0.00
X3				12.00						
GR	1908.30	0.00	1908.00	8.00	1907.90	13.00	1907.80	17.00	1907.50	26.00
GR	1907.40	30.00	1907.10	37.00	1906.80	47.00	1906.30	61.00	1906.00	69.00
GR	1905.60	82.00	1905.40	86.00	1905.30	93.00	1905.00	103.00	1904.90	108.00
GR	1904.60	119.00	1904.20	135.00	1904.10	137.00	1904.00	143.00	1903.90	150.00
GR	1903.80	156.00	1903.70	163.00	1903.60	170.00	1903.50	173.00	1903.50	176.00
GR	1903.40	180.00	1903.30	186.00	1903.00	199.00	1902.90	204.00	1902.80	208.00
GR	1902.70	213.00	1902.60	221.00	1902.50	223.00	1902.40	226.00	1902.30	232.00
GR	1902.30	234.00	1902.20	236.00	1902.20	243.00	1902.10	251.00	1902.00	262.00
GR	1901.90	272.00	1901.70	282.00	1901.60	288.00	1901.30	299.00	1901.30	304.00
GR	1901.20	307.00	1901.10	312.00	1901.00	320.00	1900.80	329.00	1900.70	333.00
GR	1900.50	344.00	1900.40	347.00	1900.30	350.00	1900.20	361.00	1900.10	364.00
GR	1900.00	372.00	1899.90	383.00	1899.80	387.00	1899.80	389.00	1899.80	404.00
GR	1899.80	419.00	1899.90	423.00	1899.91	438.00	1899.93	453.00	1899.94	468.00
GR	1899.96	483.00	1899.97	498.00	1899.99	513.00	1900.00	528.00	1899.94	543.60
GR	1899.88	559.20	1899.82	574.80	1899.76	590.40	1899.70	606.00	1899.70	609.00
GR	1899.60	618.00	1899.50	620.00	1899.20	622.00	1899.30	625.00	1899.10	632.00
GR	1899.10	635.00	1899.00	637.00	1898.75	648.50	1898.50	660.00	1898.60	665.00
GR	1898.70	667.00	1898.80	669.00	1899.10	674.00	1899.30	677.00	1899.40	680.00

GR 1899.50 685.00 1900.00 699.00 1900.10 702.00 1900.70 709.00 1900.80 712.00  
 GR 1901.00 717.00 1901.20 720.00 1901.40 723.00 1901.40 727.00 1901.30 730.00  
 GR 1901.10 733.00  
 X1 3800.00 83.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 12.00  
 GR 1909.60 0.00 1909.10 13.00 1908.70 24.00 1908.10 38.00 1907.90 46.00  
 GR 1907.80 48.00 1907.80 50.00 1907.45 61.00 1907.10 72.00 1907.00 77.00  
 GR 1906.80 82.00 1906.70 88.00 1906.70 92.00 1906.40 101.00 1906.00 114.00  
 GR 1905.60 130.00 1905.30 142.00 1905.30 146.00 1905.10 152.00 1904.90 160.00  
 GR 1904.80 165.00 1904.70 170.00 1904.70 175.00 1904.60 183.00 1904.40 188.00  
 GR 1904.00 205.00 1903.80 218.00 1903.70 227.00 1903.50 238.00 1903.30 247.00  
 GR 1903.20 256.00 1903.10 260.00 1903.00 264.00 1903.00 269.00 1902.90 273.00  
 GR 1902.70 287.00 1902.40 299.00 1902.20 313.00 1902.00 321.00 1901.90 325.00  
 GR 1901.80 335.00 1901.60 344.00 1901.60 348.00 1901.50 351.00 1901.35 360.50  
 GR 1901.20 370.00 1901.20 374.00 1901.10 377.00 1901.10 379.00 1901.00 381.00  
 GR 1901.00 384.00 1900.90 387.00 1900.90 389.00 1900.80 393.00 1900.80 395.00  
 GR 1900.80 398.00 1900.80 400.00 1900.80 416.00 1900.80 419.00 1900.80 423.00  
 GR 1900.80 427.00 1900.80 433.00 1900.90 435.00 1901.00 439.00 1901.00 444.00  
 GR 1901.10 446.00 1901.10 448.00 1901.10 465.00 1901.00 468.00 1901.00 478.50  
 GR 1901.00 489.00 1901.00 492.00 1901.00 496.00 1900.90 503.00 1900.90 506.00  
 GR 1900.80 510.00 1900.70 514.00 1900.50 523.00 1900.30 533.00 1900.20 537.00  
 GR 1900.00 547.00 1900.04 563.57 1900.09 580.14 1900.13 596.71 1900.17 613.29  
 GR 1900.21 629.86 1900.26 646.43 1900.30 663.00 1900.60 673.00 1900.90 680.00  
 GR 1901.45 689.50 1902.00 699.00 1902.67 715.67 1903.33 732.33 1904.00 749.00  
 X1 3900.00 76.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 14.00  
 GR 1910.90 0.00 1910.50 8.00 1910.00 19.00 1909.80 27.00 1909.80 29.00  
 GR 1909.40 39.00 1909.20 49.00 1908.70 64.00 1908.00 81.00 1907.70 92.50  
 GR 1907.40 104.00 1907.10 116.00 1906.90 124.00 1906.70 130.00 1906.60 136.00  
 GR 1906.30 144.00 1906.20 150.00 1906.10 153.00 1906.00 158.00 1905.70 174.00  
 GR 1905.20 191.00 1905.10 197.00 1905.00 200.00 1905.00 204.00 1904.80 212.00  
 GR 1904.70 216.00 1904.60 221.00 1904.50 225.00 1904.40 228.00 1904.40 230.00  
 GR 1904.40 232.00 1904.40 238.00 1904.30 247.00 1904.20 252.00 1904.00 262.00  
 GR 1903.80 274.00 1903.60 282.00 1903.60 292.00 1903.50 294.00 1903.40 297.00  
 GR 1903.30 303.00 1903.10 313.00 1903.00 318.00 1902.90 323.00 1902.80 330.00  
 GR 1902.70 333.00 1902.60 343.00 1902.40 355.00 1902.30 363.00 1902.00 379.00  
 GR 1901.97 392.67 1901.93 406.33 1901.90 420.00 1902.00 426.00 1902.00 430.00  
 GR 1902.10 434.00 1902.10 440.00 1902.10 451.00 1902.10 461.00 1901.95 475.00  
 GR 1901.80 489.00 1901.60 497.00 1901.40 502.00 1901.30 508.00 1901.20 512.00  
 GR 1901.34 528.40 1901.48 544.80 1901.62 561.20 1901.76 577.60 1901.90 594.00  
 GR 1902.00 601.00 1901.55 616.00 1901.10 631.00 1901.10 635.00 1900.90 638.00  
 GR 1901.15 649.50 1901.40 661.00 1901.90 677.00 1901.93 690.25 1901.95 703.50  
 GR 1901.98 716.75 1902.00 730.00 1902.70 735.00 1904.00 741.00 1905.00 755.00  
 GR 1906.00 769.00 1905.80 772.00 1905.00 783.00 1904.40 792.00 1904.00 798.00  
 X1 4000.00 78.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 19.00  
 GR 1913.70 0.00 1912.95 12.00 1912.20 24.00 1911.90 29.00 1911.40 41.00  
 GR 1911.10 49.00 1910.80 56.00 1910.50 63.00 1910.00 77.00 1909.80 85.00  
 GR 1909.50 94.00 1909.40 97.00 1909.30 102.00 1908.80 115.00 1908.50 125.00  
 GR 1908.40 127.00 1908.30 130.00 1908.20 132.00 1908.20 137.00 1908.00 145.00  
 GR 1908.00 149.00 1907.80 158.00 1907.70 161.00 1907.60 166.00 1907.30 178.00  
 GR 1907.20 181.00 1907.00 190.00 1906.90 196.00 1906.80 201.00 1906.80 205.00  
 GR 1906.60 213.00 1906.40 221.00 1906.30 224.00 1906.20 228.00 1906.00 237.00  
 GR 1905.80 245.00 1905.70 250.00 1905.70 252.00 1905.50 262.00 1905.40 264.00  
 GR 1905.20 274.00 1905.10 278.00 1905.00 284.00 1904.90 288.00 1904.80 293.00  
 GR 1904.60 299.00 1904.20 313.00 1904.00 322.00 1903.80 333.00 1903.70 340.00  
 GR 1903.60 348.00 1903.50 355.00 1903.30 361.00 1903.20 375.50 1903.10 390.00  
 GR 1903.00 404.50 1902.90 419.00 1903.00 421.00 1903.00 426.00 1903.00 430.00  
 GR 1903.10 433.00 1903.10 436.00 1903.20 440.00 1903.20 443.00 1903.20 449.00  
 GR 1903.20 454.00 1903.00 469.00 1902.90 472.00 1902.80 474.00 1902.70 477.00  
 GR 1902.60 480.00 1902.50 484.00 1902.40 487.00 1902.30 489.00 1902.10 496.00  
 GR 1902.09 512.10 1902.08 528.20 1902.07 544.30 1902.06 560.40 1902.05 576.50

GR 1902.04 592.60 1902.03 608.70 1902.02 624.80 1902.01 640.90 1902.00 657.00  
 GR 1902.10 660.00 1902.25 669.50 1902.40 679.00 1902.60 687.00 1902.85 701.00  
 GR 1903.10 715.00 1903.56 729.20 1904.02 743.40 1904.48 757.60 1904.94 771.80  
 GR 1905.40 786.00 1906.10 798.00  
 X1 4100.00 95.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 11.00  
 GR 1917.20 0.00 1916.00 15.00 1915.80 18.00 1915.00 31.00 1914.70 38.00  
 GR 1914.00 51.00 1913.55 61.00 1913.10 71.00 1912.50 83.00 1912.00 92.00  
 GR 1911.70 103.00 1911.60 108.00 1911.40 114.00 1911.30 116.00 1911.00 122.00  
 GR 1910.70 129.00 1910.60 136.00 1910.20 147.00 1910.20 149.00 1910.00 156.00  
 GR 1909.90 160.00 1909.50 173.00 1909.30 178.00 1909.10 183.00 1908.70 194.50  
 GR 1908.30 206.00 1908.20 208.00 1907.80 221.00 1907.80 223.00 1907.40 237.00  
 GR 1907.20 245.00 1906.80 259.00 1906.45 272.00 1906.10 285.00 1906.00 289.00  
 GR 1905.90 295.00 1905.80 301.00 1905.50 314.00 1905.30 323.00 1905.20 326.00  
 GR 1905.10 333.00 1904.90 338.00 1904.80 345.00 1904.60 358.00 1904.40 365.00  
 GR 1904.20 373.00 1904.20 375.00 1904.20 377.00 1904.10 382.00 1904.10 385.00  
 GR 1904.20 389.00 1904.00 397.00 1904.10 405.00 1904.10 408.00 1904.20 413.00  
 GR 1904.20 418.00 1904.15 427.00 1904.10 436.00 1904.10 442.00 1903.95 455.00  
 GR 1903.80 468.00 1903.60 484.00 1903.60 488.00 1903.60 497.00 1903.50 500.00  
 GR 1903.40 505.00 1903.20 515.00 1902.90 529.00 1902.60 542.00 1902.40 548.00  
 GR 1902.40 551.00 1902.30 557.00 1902.25 566.00 1902.20 575.00 1902.30 582.00  
 GR 1902.50 585.00 1902.50 588.00 1902.70 596.00 1902.90 607.00 1903.00 610.00  
 GR 1903.10 612.00 1903.20 615.00 1903.20 617.00 1903.20 621.00 1903.20 624.00  
 GR 1903.10 626.00 1903.10 630.00 1903.10 634.00 1903.10 636.00 1903.10 641.00  
 GR 1903.10 644.00 1903.00 648.00 1903.10 657.50 1903.20 667.00 1903.30 672.00  
 GR 1903.40 676.00 1903.60 683.00 1903.70 686.00 1903.80 695.00 1903.90 706.00  
 GR 1903.93 722.00 1903.97 738.00 1904.00 754.00 1904.67 767.67 1905.33 781.33  
 GR 1906.00 795.00  
 X1 4200.00 105.00 0.00 800.00 100.00 100.00 100.00 0.00 0.00 0.00  
 X3 13.00  
 GR 1923.90 0.00 1924.20 3.00 1924.30 7.00 1924.20 11.00 1923.10 17.00  
 GR 1920.60 29.00 1918.90 38.00 1918.00 49.00 1917.60 55.00 1917.10 65.00  
 GR 1916.80 71.00 1916.30 81.00 1916.00 86.00 1915.60 92.00 1914.80 101.00  
 GR 1914.00 110.00 1913.80 114.00 1913.60 118.00 1912.75 131.50 1911.90 145.00  
 GR 1911.90 147.00 1911.50 155.00 1910.75 171.00 1910.00 187.00 1909.50 201.75  
 GR 1909.00 216.50 1908.50 231.25 1908.00 246.00 1908.00 250.00 1908.00 253.00  
 GR 1907.70 268.00 1907.60 271.00 1907.50 275.00 1907.00 292.00 1906.70 302.00  
 GR 1906.40 312.00 1906.40 314.00 1906.30 317.00 1906.20 319.00 1906.00 328.00  
 GR 1905.90 333.00 1905.80 338.00 1905.70 346.00 1905.60 358.00 1905.60 361.00  
 GR 1905.50 367.00 1905.40 372.00 1905.30 380.00 1905.20 384.00 1905.10 391.00  
 GR 1905.20 395.00 1905.20 400.00 1905.10 405.00 1905.25 414.00 1905.40 423.00  
 GR 1905.50 426.00 1905.50 428.00 1905.50 435.00 1905.40 438.00 1905.40 440.00  
 GR 1905.40 446.00 1905.40 448.00 1905.30 450.00 1905.20 453.00 1905.10 455.00  
 GR 1905.00 460.00 1904.90 462.00 1904.80 465.00 1904.60 477.00 1904.60 479.00  
 GR 1904.30 496.00 1904.50 498.00 1904.40 509.00 1904.30 515.00 1904.20 523.00  
 GR 1904.16 536.60 1904.12 550.20 1904.08 563.80 1904.04 577.40 1904.00 591.00  
 GR 1904.10 596.00 1904.20 602.00 1904.20 616.00 1904.20 620.00 1904.40 625.00  
 GR 1904.40 631.00 1904.50 634.00 1904.60 637.00 1904.70 639.00 1904.70 642.00  
 GR 1904.70 647.00 1904.70 654.00 1904.70 656.00 1904.70 662.00 1904.70 664.00  
 GR 1904.70 670.00 1904.70 675.00 1904.60 677.00 1904.60 682.00 1904.30 693.00  
 GR 1904.50 700.00 1904.40 709.00 1904.30 715.00 1904.30 718.00 1904.20 722.00  
 GR 1904.20 724.00 1904.20 728.00 1904.30 732.00 1904.40 735.00 1904.50 737.00  
 GR 1904.60 739.00 1904.70 741.00 1905.10 753.00 1905.40 761.00 1905.80 772.00  
 GR 1906.70 781.50 1907.60 791.00 1908.00 795.00  
 GS 0.13 0.14 0.26 0.20 0.45 0.20 0.73 0.20 2.20 0.26  
 EJ 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

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## TI INITIAL BED MATERIAL COMPOSITION

SECTION	SIZE FRACTION MM				
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1.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
100.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
200.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
300.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
400.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
500.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
600.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
700.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
800.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
900.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
1000.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
1100.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
1200.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
1300.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
1400.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
1500.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
1600.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
1700.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
1800.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
1900.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
2000.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
2100.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
2200.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
2300.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
2400.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
2500.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
2600.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
2700.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
2800.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
2900.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
3000.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261

3100.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
3200.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
3300.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
3400.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
3500.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
3600.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
3700.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
3800.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
3900.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
4000.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
4100.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
4200.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261

## THE ENGELUND-HANSEN SEDIMENT FORMULA IS USED

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TIME = 4.00 HRS DT = 100 SECS TIME STEP = 0

SECTION	W.S.ELEV.	WIDTH	DEPTH	Q	V	SLOPE	D50	QS/Q	FR	SED. YIELD
FT	FT	FT	CFS	FPS	MM	1000 PPM	TONS			

1.000	1863.71	28.6	0.41	60	11.96	0.595187	0.538853.42	5.03	0.162E+01	
100.000	1866.85	653.8	2.85	60	0.08	0.000002	0.52	0.00	0.01	0.358E-09
200.000	1866.95	496.3	1.15	60	0.25	0.000063	0.52	0.00	0.06	0.110E-06
300.000	1867.55	215.5	0.45	60	1.68	0.012615	0.52	6.78	0.73	0.124E-02
400.000	1868.35	240.5	0.31	60	1.63	0.013292	0.52	6.84	0.74	0.125E-02
500.000	1869.15	45.3	0.55	60	3.38	0.016285	0.52	16.16	0.95	0.296E-02
600.000	1870.21	318.8	0.21	60	1.20	0.006917	0.52	1.91	0.53	0.350E-03
700.000	1871.11	212.7	0.41	60	1.70	0.012922	0.52	3.60	0.74	0.657E-03
800.000	1872.17	309.8	0.37	60	1.48	0.013450	0.52	0.80	0.72	0.147E-03
900.000	1872.97	151.3	0.37	60	2.00	0.014142	0.52	4.77	0.79	0.873E-03
1000.000	1874.25	241.0	0.45	60	1.54	0.010954	0.52	2.48	0.67	0.453E-03
1100.000	1874.80	105.6	0.70	60	1.33	0.002232	0.52	0.64	0.36	0.117E-03
1200.000	1875.80	73.6	0.50	60	2.85	0.017617	0.52	12.51	0.94	0.229E-02
1300.000	1876.99	105.1	0.49	60	2.01	0.008876	0.52	3.06	0.67	0.559E-03
1400.000	1877.89	117.6	0.49	60	1.82	0.007363	0.52	0.99	0.61	0.181E-03
1500.000	1878.59	51.6	0.59	60	2.69	0.009040	0.52	2.82	0.72	0.515E-03
1600.000	1879.63	72.2	0.63	60	2.61	0.012756	0.52	6.40	0.81	0.117E-02
1700.000	1880.33	124.7	0.33	60	2.15	0.013791	0.52	4.35	0.80	0.795E-03
1800.000	1880.93	82.2	0.53	60	2.46	0.012461	0.52	4.59	0.80	0.839E-03
1900.000	1882.12	159.5	0.32	60	1.77	0.010104	0.52	5.80	0.68	0.106E-02
2000.000	1883.22	88.1	0.42	60	2.53	0.015068	0.52	8.30	0.86	0.152E-02
2100.000	1884.34	229.1	0.44	60	1.39	0.007304	0.52	2.64	0.57	0.482E-03
2200.000	1885.34	229.0	0.34	60	1.76	0.015877	0.52	5.09	0.80	0.930E-03
2300.000	1886.34	237.0	0.34	60	1.23	0.005085	0.52	0.35	0.48	0.644E-04
2400.000	1887.51	253.1	0.41	60	1.42	0.008945	0.52	0.89	0.61	0.163E-03
2500.000	1888.41	199.8	0.41	60	1.57	0.009201	0.52	2.10	0.64	0.383E-03
2600.000	1888.92	150.8	0.72	60	1.19	0.002489	0.52	0.60	0.36	0.109E-03
2700.000	1890.11	248.6	0.41	60	1.65	0.014260	0.52	1.45	0.76	0.266E-03
2800.000	1891.12	116.2	0.62	60	1.91	0.008536	0.52	5.48	0.65	0.100E-02
2900.000	1892.16	167.6	0.46	60	2.03	0.017033	0.52	5.78	0.85	0.106E-02

3000.000	1893.19	170.1	0.49	60	1.61	0.008010	0.52	3.78	0.61	0.691E-03
3100.000	1894.19	204.0	0.49	60	1.67	0.011494	0.52	6.04	0.70	0.110E-02
3200.000	1894.99	159.0	0.59	60	2.12	0.018262	0.52	8.18	0.89	0.150E-02
3300.000	1895.77	136.8	0.87	60	1.29	0.002824	0.52	0.79	0.39	0.144E-03
3400.000	1896.37	187.7	0.37	60	1.52	0.007525	0.52	3.18	0.58	0.582E-03
3500.000	1897.17	67.3	0.47	60	2.59	0.011326	0.52	4.50	0.78	0.822E-03
3600.000	1898.32	160.3	0.32	60	1.77	0.010040	0.52	5.72	0.68	0.105E-02
3700.000	1899.22	48.9	0.72	60	3.20	0.014939	0.52	12.42	0.91	0.227E-02
3800.000	1900.42	139.8	0.42	60	1.69	0.007297	0.52	3.72	0.59	0.680E-03
3900.000	1901.52	98.1	0.62	60	2.60	0.018966	0.52	12.37	0.94	0.226E-02
4000.000	1902.22	175.7	0.22	60	2.12	0.020729	0.52	0.80	0.93	0.146E-03
4100.000	1902.72	60.2	0.52	60	3.15	0.018654	0.52	16.68	0.98	0.305E-02
4200.000	1904.42	169.0	0.42	60	1.66	0.008750	0.52	1.76	0.63	0.321E-03

1

TIME = 17.03 HRS DT = 120 SECS TIME STEP = 424

SECTION	W.S.ELEV.	WIDTH	DEPTH	Q	V	SLOPE	D50	QS/Q	FR	SED.	YIELD
FT	FT	FT	CFS	FPS	MM	1000 PPM	TONS				

1.000	1864.80	420.8	4.67	1071	4.25	0.014686	0.63	15.68	0.97	0.638E+04
100.000	1865.30	253.8	2.75	1071	4.67	0.010299	0.74	10.67	0.87	0.641E+04
200.000	1866.70	397.9	3.19	1071	3.92	0.010401	0.59	7.62	0.83	0.546E+04
300.000	1867.80	485.7	3.25	1071	3.63	0.010499	0.66	9.58	0.82	0.476E+04
400.000	1869.00	766.2	2.34	1071	3.03	0.010483	0.53	0.84	0.79	0.377E+04
500.000	1870.10	751.2	3.13	1071	2.98	0.009672	0.53	12.92	0.76	0.389E+04
600.000	1870.90	686.0	1.12	1071	3.22	0.011033	0.55	17.02	0.81	0.386E+04
700.000	1871.93	658.8	1.73	1071	3.26	0.010982	0.52	18.80	0.81	0.410E+04
800.000	1872.83	646.7	2.49	1071	3.61	0.015072	0.45	21.40	0.94	0.432E+04
900.000	1874.00	647.4	1.73	1071	3.26	0.010694	0.46	3.03	0.81	0.468E+04
1000.000	1875.00	590.5	2.47	1071	3.36	0.010432	0.60	15.13	0.80	0.498E+04
1100.000	1876.08	348.0	1.72	1071	4.53	0.014012	0.54	19.76	0.97	0.517E+04
1200.000	1877.31	405.0	2.21	1071	3.89	0.010347	0.53	11.36	0.83	0.572E+04
1300.000	1878.14	331.3	2.58	1071	3.91	0.008045	0.65	5.87	0.76	0.637E+04
1400.000	1878.91	247.9	3.05	1071	4.50	0.008783	0.56	4.84	0.81	0.647E+04
1500.000	1879.82	295.7	3.42	1071	4.59	0.011774	0.59	16.26	0.91	0.632E+04
1600.000	1880.77	217.3	3.82	1071	4.36	0.006607	0.58	6.28	0.72	0.596E+04
1700.000	1881.49	242.1	3.11	1071	4.41	0.007934	0.63	6.16	0.78	0.563E+04
1800.000	1882.36	329.8	3.16	1071	3.89	0.007833	0.58	8.28	0.75	0.556E+04
1900.000	1883.12	291.9	3.05	1071	3.46	0.004501	0.61	1.35	0.59	0.575E+04
2000.000	1884.02	324.8	2.84	1071	4.24	0.010253	0.51	4.84	0.85	0.550E+04
2100.000	1885.02	348.3	2.72	1071	4.63	0.015025	0.65	20.54	1.00	0.529E+04
2200.000	1885.72	335.7	2.68	1071	4.51	0.013209	0.65	9.34	0.95	0.534E+04
2300.000	1887.06	386.0	2.09	1071	4.22	0.012654	0.57	17.42	0.92	0.481E+04
2400.000	1888.04	380.4	2.68	1071	3.29	0.005450	0.67	2.56	0.63	0.496E+04
2500.000	1888.94	411.0	2.13	1071	4.07	0.012191	0.50	3.10	0.90	0.445E+04
2600.000	1889.10	504.4	1.90	1071	4.08	0.016184	0.51	25.62	1.00	0.424E+04
2700.000	1891.00	410.4	2.29	1071	4.02	0.011757	0.60	3.86	0.88	0.498E+04
2800.000	1892.00	441.5	2.52	1071	4.21	0.015033	0.49	19.30	0.98	0.547E+04
2900.000	1892.60	347.9	2.77	1071	4.27	0.011584	0.65	14.40	0.89	0.581E+04
3000.000	1894.00	413.3	2.76	1071	3.84	0.010155	0.69	3.71	0.82	0.514E+04
3100.000	1894.76	364.7	3.02	1071	3.45	0.006008	0.58	9.21	0.66	0.525E+04
3200.000	1895.58	441.5	3.65	1071	4.05	0.013278	0.50	19.09	0.92	0.474E+04
3300.000	1896.68	462.4	2.07	1071	3.45	0.008254	0.46	4.46	0.74	0.441E+04
3400.000	1897.58	449.3	2.24	1071	3.72	0.010241	0.61	9.74	0.82	0.477E+04
3500.000	1898.58	479.1	2.58	1071	3.68	0.010733	0.39	3.67	0.83	0.558E+04
3600.000	1899.58	400.9	2.34	1071	4.32	0.014382	0.49	22.92	0.97	0.651E+04
3700.000	1900.65	374.8	2.67	1071	3.38	0.005837	0.60	7.95	0.65	0.720E+04
3800.000	1901.35	337.8	3.32	1071	4.18	0.010269	0.58	13.64	0.84	0.728E+04
3900.000	1902.44	380.9	4.30	1071	4.06	0.010981	0.34	2.47	0.86	0.720E+04
4000.000	1903.14	366.8	3.31	1071	4.50	0.014677	0.45	33.21	0.98	0.723E+04
4100.000	1904.06	242.2	3.01	1071	3.94	0.005435	0.44	0.82	0.66	0.709E+04
4200.000	1905.23	334.5	1.23	1071	4.28	0.011024	0.52	11.99	0.87	0.699E+04

ID

42 SECTION 4100.00 TIME = 17.03 HRS WS = 1904.06 WIDTH = 242.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1917.20	0.00	0.00	0.0	1916.00	0.00	0.00	15.0	1915.80	0.00	0.00	18.0
1915.00	0.00	0.00	31.0	1914.70	0.00	0.00	38.0	1914.00	0.00	0.00	51.0
1913.55	0.00	0.00	61.0	1913.10	0.00	0.00	71.0	1912.50	0.00	0.00	83.0
1912.00	0.00	0.00	92.0	1911.70	0.00	0.00	103.0	1911.60	0.00	0.00	108.0
1911.40	0.00	0.00	114.0	1911.30	0.00	0.00	116.0	1911.00	0.00	0.00	122.0
1910.70	0.00	0.00	129.0	1910.60	0.00	0.00	136.0	1910.20	0.00	0.00	147.0
1910.20	0.00	0.00	149.0	1910.00	0.00	0.00	156.0	1909.90	0.00	0.00	160.0
1909.50	0.00	0.00	173.0	1909.30	0.00	0.00	178.0	1909.10	0.00	0.00	183.0
1908.70	0.00	0.00	194.5	1908.30	0.00	0.00	206.0	1908.20	0.00	0.00	208.0
1907.80	0.00	0.00	221.0	1907.80	0.00	0.00	223.0	1907.40	0.00	0.00	237.0
1907.20	0.00	0.00	245.0	1906.80	0.00	0.00	259.0	1906.45	0.00	0.00	272.0
1906.10	0.00	0.00	285.0	1906.00	0.00	0.00	289.0	1905.90	0.00	0.00	295.0
1905.80	0.00	0.00	301.0	1905.50	0.00	0.00	314.0	1905.30	0.00	0.00	323.0
1905.20	0.00	0.00	326.0	1905.10	0.00	0.00	333.0	1904.90	0.00	0.00	338.0
1904.80	0.00	0.00	345.0	1904.60	0.00	0.00	358.0	1904.40	0.00	0.00	365.0
1904.20	0.00	0.00	373.0	1904.20	0.00	0.00	375.0	1904.20	0.00	0.00	377.0
1904.13	0.00	0.03	382.0	1904.13	0.00	0.03	385.0	1904.20	0.00	0.00	389.0
1904.09	0.00	0.09	397.0	1904.13	0.00	0.03	405.0	1904.13	0.00	0.03	408.0
1904.20	0.00	0.00	413.0	1904.20	0.00	0.00	418.0	1904.16	0.00	0.01	427.0
1904.13	0.00	0.03	436.0	1904.13	0.00	0.03	442.0	1904.08	0.00	0.13	455.0
1904.05	0.00	0.25	468.0	1904.02	0.00	0.42	484.0	1904.02	0.00	0.42	488.0
1904.02	0.00	0.42	497.0	1904.00	0.00	0.50	500.0	1903.95	0.01	0.55	505.0
1903.26	0.02	0.06	515.0	1902.64	0.02	-0.26	529.0	1901.99	0.03	-0.61	542.0
1901.63	0.03	-0.77	548.0	1901.59	0.03	-0.81	551.0	1901.39	0.04	-0.91	557.0
1901.22	0.04	-1.03	566.0	1901.09	0.04	-1.11	575.0	1901.25	0.04	-1.05	582.0
1901.56	0.03	-0.94	585.0	1901.59	0.03	-0.90	588.0	1902.03	0.03	-0.67	596.0
1902.52	0.03	-0.38	607.0	1902.71	0.02	-0.29	610.0	1902.94	0.02	-0.16	612.0
1903.15	0.02	-0.05	615.0	1903.16	0.02	-0.04	617.0	1903.18	0.02	-0.02	621.0
1903.20	0.02	0.00	624.0	1903.03	0.02	-0.07	626.0	1903.06	0.02	-0.04	630.0
1903.08	0.02	-0.02	634.0	1903.10	0.02	-0.01	636.0	1903.13	0.02	0.03	641.0
1903.14	0.02	0.04	644.0	1902.99	0.02	-0.01	648.0	1903.23	0.02	0.13	657.5
1903.43	0.01	0.23	667.0	1903.64	0.01	0.34	672.0	1903.97	0.00	0.57	676.0
1904.02	0.00	0.42	683.0	1904.03	0.00	0.33	686.0	1904.05	0.00	0.25	695.0
1904.07	0.00	0.17	706.0	1904.07	0.00	0.14	722.0	1904.08	0.00	0.12	738.0
1904.09	0.00	0.09	754.0	1904.67	0.00	0.00	767.7	1905.33	0.00	0.00	781.3
1906.00	0.00	0.00	795.0								

ID

41 SECTION 4000.00 TIME = 17.03 HRS WS = 1903.14 WIDTH = 366.8

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1913.70	0.00	0.00	0.0	1912.95	0.00	0.00	12.0	1912.20	0.00	0.00	24.0
1911.90	0.00	0.00	29.0	1911.40	0.00	0.00	41.0	1911.10	0.00	0.00	49.0
1910.80	0.00	0.00	56.0	1910.50	0.00	0.00	63.0	1910.00	0.00	0.00	77.0
1909.80	0.00	0.00	85.0	1909.50	0.00	0.00	94.0	1909.40	0.00	0.00	97.0
1909.30	0.00	0.00	102.0	1908.80	0.00	0.00	115.0	1908.50	0.00	0.00	125.0
1908.40	0.00	0.00	127.0	1908.30	0.00	0.00	130.0	1908.20	0.00	0.00	132.0
1908.20	0.00	0.00	137.0	1908.00	0.00	0.00	145.0	1908.00	0.00	0.00	149.0
1907.80	0.00	0.00	158.0	1907.70	0.00	0.00	161.0	1907.60	0.00	0.00	166.0
1907.30	0.00	0.00	178.0	1907.20	0.00	0.00	181.0	1907.00	0.00	0.00	190.0
1906.90	0.00	0.00	196.0	1906.80	0.00	0.00	201.0	1906.80	0.00	0.00	205.0
1906.60	0.00	0.00	213.0	1906.40	0.00	0.00	221.0	1906.30	0.00	0.00	224.0
1906.20	0.00	0.00	228.0	1906.00	0.00	0.00	237.0	1905.80	0.00	0.00	245.0
1905.70	0.00	0.00	250.0	1905.70	0.00	0.00	252.0	1905.50	0.00	0.00	262.0
1905.40	0.00	0.00	264.0	1905.20	0.00	0.00	274.0	1905.10	0.00	0.00	278.0

1905.00 0.00 0.00 284.0 1904.90 0.00 0.00 288.0 1904.80 0.00 0.00 293.0  
 1904.60 0.00 0.00 299.0 1904.20 0.00 0.00 313.0 1904.00 0.00 0.00 322.0  
 1903.80 0.00 0.00 333.0 1903.70 0.00 0.00 340.0 1903.60 0.00 0.00 348.0  
 1903.50 0.00 0.00 355.0 1903.03 0.00 -0.27 360.6 1902.87 0.00 -0.33 375.1  
 1902.90 0.00 -0.20 389.8 1902.89 0.00 -0.11 404.4 1902.91 0.00 0.01 418.8  
 1902.87 -0.01 -0.13 421.0 1902.86 -0.01 -0.14 426.0 1902.89 -0.01 -0.11 430.2  
 1902.88 -0.01 -0.22 433.0 1902.86 -0.01 -0.24 436.4 1902.89 -0.01 -0.31 440.0  
 1902.88 -0.01 -0.32 443.0 1902.88 -0.01 -0.32 449.0 1902.88 -0.01 -0.32 454.0  
 1902.88 -0.01 -0.12 468.3 1902.84 -0.01 -0.06 471.7 1902.84 -0.01 0.04 473.7  
 1902.84 -0.01 0.14 476.7 1902.84 -0.01 0.24 479.8 1902.90 -0.01 0.40 483.9  
 1902.89 -0.01 0.49 487.0 1902.83 -0.01 0.53 489.0 1902.87 -0.01 0.77 496.0  
 1902.87 -0.01 0.77 512.1 1902.86 -0.01 0.78 528.2 1902.85 -0.01 0.78 544.3  
 1902.86 -0.01 0.80 560.4 1902.84 -0.01 0.79 576.5 1902.83 -0.02 0.79 592.6  
 1902.90 -0.01 0.87 608.7 1902.28 -0.05 0.26 624.8 1901.24 -0.11 -0.77 640.9  
 1899.62 -0.20 -2.38 657.0 1901.01 -0.12 -1.09 660.0 1901.16 -0.11 -1.09 669.6  
 1901.33 -0.10 -1.07 679.1 1901.53 -0.09 -1.07 687.7 1901.63 -0.08 -1.22 701.6  
 1901.72 -0.07 -1.39 716.3 1903.56 0.00 0.00 729.2 1904.02 0.00 0.00 743.4  
 1904.48 0.00 0.00 757.6 1904.94 0.00 0.00 771.8 1905.40 0.00 0.00 786.0  
 1906.10 0.00 0.00 798.0

ID  
 40 SECTION 3900.00 TIME = 17.03 HRS WS = 1902.44 WIDTH = 380.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1910.90 0.00 0.00 0.0 1910.50 0.00 0.00 8.0 1910.00 0.00 0.00 19.0  
 1909.80 0.00 0.00 27.0 1909.80 0.00 0.00 29.0 1909.40 0.00 0.00 39.0  
 1909.20 0.00 0.00 49.0 1908.70 0.00 0.00 64.0 1908.00 0.00 0.00 81.0  
 1907.70 0.00 0.00 92.5 1907.40 0.00 0.00 104.0 1907.10 0.00 0.00 116.0  
 1906.90 0.00 0.00 124.0 1906.70 0.00 0.00 130.0 1906.60 0.00 0.00 136.0  
 1906.30 0.00 0.00 144.0 1906.20 0.00 0.00 150.0 1906.10 0.00 0.00 153.0  
 1906.00 0.00 0.00 158.0 1905.70 0.00 0.00 174.0 1905.20 0.00 0.00 191.0  
 1905.10 0.00 0.00 197.0 1905.00 0.00 0.00 200.0 1905.00 0.00 0.00 204.0  
 1904.80 0.00 0.00 212.0 1904.70 0.00 0.00 216.0 1904.60 0.00 0.00 221.0  
 1904.50 0.00 0.00 225.0 1904.40 0.00 0.00 228.0 1904.40 0.00 0.00 230.0  
 1904.40 0.00 0.00 232.0 1904.40 0.00 0.00 238.0 1904.30 0.00 0.00 247.0  
 1904.20 0.00 0.00 252.0 1904.00 0.00 0.00 262.0 1903.80 0.00 0.00 274.0  
 1903.60 0.00 0.00 282.0 1903.60 0.00 0.00 292.0 1903.50 0.00 0.00 294.0  
 1903.40 0.00 0.00 297.0 1903.30 0.00 0.00 303.0 1903.10 0.00 0.00 313.0  
 1903.00 0.00 0.00 318.0 1902.90 0.00 0.00 323.0 1902.80 0.00 0.00 330.0  
 1902.70 0.00 0.00 333.0 1902.60 0.00 0.00 343.0 1902.36 0.01 -0.04 355.0  
 1902.33 0.01 0.03 363.0 1902.33 0.01 0.33 378.9 1902.34 0.01 0.37 392.8  
 1902.35 0.01 0.41 406.3 1902.30 0.02 0.40 420.0 1902.30 0.02 0.30 426.0  
 1902.30 0.02 0.29 430.2 1902.30 0.02 0.20 434.0 1902.30 0.02 0.20 440.0  
 1902.30 0.02 0.20 451.0 1902.29 0.02 0.19 461.0 1902.28 0.02 0.33 474.8  
 1902.27 0.02 0.47 489.0 1902.26 0.02 0.66 497.1 1902.27 0.02 0.87 502.1  
 1902.26 0.02 0.96 508.1 1902.21 0.02 1.01 512.0 1902.19 0.02 0.85 528.4  
 1902.21 0.02 0.73 544.8 1902.16 0.02 0.54 561.3 1902.01 0.03 0.25 577.8  
 1902.20 0.02 0.30 594.0 1902.19 0.02 0.19 601.0 1900.53 0.07 -1.02 615.7  
 1898.63 0.10 -2.47 631.0 1898.24 0.11 -2.86 635.0 1898.24 0.11 -2.66 638.0  
 1899.41 0.09 -1.74 649.5 1900.24 0.08 -1.16 661.2 1901.85 0.04 -0.05 677.0  
 1901.89 0.03 -0.04 690.3 1901.89 0.03 -0.06 703.5 1902.05 0.03 0.08 716.7  
 1902.33 0.01 0.33 730.3 1902.70 0.00 0.00 735.0 1904.00 0.00 0.00 741.0  
 1905.00 0.00 0.00 755.0 1906.00 0.00 0.00 769.0 1905.80 0.00 0.00 772.0  
 1905.00 0.00 0.00 783.0 1904.40 0.00 0.00 792.0 1904.00 0.00 0.00 798.0

ID  
 39 SECTION 3800.00 TIME = 17.03 HRS WS = 1901.35 WIDTH = 337.8

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1909.60 0.00 0.00 0.0 1909.10 0.00 0.00 13.0 1908.70 0.00 0.00 24.0

1908.10	0.00	0.00	38.0	1907.90	0.00	0.00	46.0	1907.80	0.00	0.00	48.0
1907.80	0.00	0.00	50.0	1907.45	0.00	0.00	61.0	1907.10	0.00	0.00	72.0
1907.00	0.00	0.00	77.0	1906.80	0.00	0.00	82.0	1906.70	0.00	0.00	88.0
1906.70	0.00	0.00	92.0	1906.40	0.00	0.00	101.0	1906.00	0.00	0.00	114.0
1905.60	0.00	0.00	130.0	1905.30	0.00	0.00	142.0	1905.30	0.00	0.00	146.0
1905.10	0.00	0.00	152.0	1904.90	0.00	0.00	160.0	1904.80	0.00	0.00	165.0
1904.70	0.00	0.00	170.0	1904.70	0.00	0.00	175.0	1904.60	0.00	0.00	183.0
1904.40	0.00	0.00	188.0	1904.00	0.00	0.00	205.0	1903.80	0.00	0.00	218.0
1903.70	0.00	0.00	227.0	1903.50	0.00	0.00	238.0	1903.30	0.00	0.00	247.0
1903.20	0.00	0.00	256.0	1903.10	0.00	0.00	260.0	1903.00	0.00	0.00	264.0
1903.00	0.00	0.00	269.0	1902.90	0.00	0.00	273.0	1902.70	0.00	0.00	287.0
1902.40	0.00	0.00	299.0	1902.20	0.00	0.00	313.0	1902.00	0.00	0.00	321.0
1901.90	0.00	0.00	325.0	1901.80	0.00	0.00	335.0	1901.60	0.00	0.00	344.0
1901.60	0.00	0.00	348.0	1901.46	0.00	-0.04	351.0	1901.08	0.00	-0.27	360.1
1901.00	0.00	-0.20	370.0	1901.03	0.00	-0.17	374.1	1901.02	0.00	-0.08	377.1
1901.02	0.00	-0.08	379.0	1901.02	0.00	0.02	380.9	1901.02	0.00	0.02	384.0
1901.02	0.00	0.12	386.9	1900.99	0.00	0.09	389.0	1900.99	-0.01	0.19	393.0
1900.99	-0.01	0.19	395.0	1900.99	-0.01	0.19	398.0	1900.99	-0.01	0.19	400.0
1901.01	-0.01	0.21	416.0	1901.01	-0.01	0.21	419.0	1900.99	-0.01	0.19	423.0
1900.98	-0.01	0.18	427.0	1901.03	-0.01	0.23	433.0	1901.03	-0.01	0.13	435.1
1901.03	-0.01	0.03	439.0	1901.00	-0.01	0.00	444.2	1901.00	-0.01	-0.10	446.0
1901.00	-0.01	-0.10	448.0	1901.02	-0.01	-0.08	465.0	1901.01	-0.01	0.01	467.8
1901.01	-0.01	0.01	478.5	1901.00	-0.01	0.00	489.0	1900.99	-0.01	-0.01	492.0
1901.01	-0.01	0.01	496.0	1900.99	-0.01	0.09	502.8	1901.02	-0.01	0.12	506.0
1900.99	-0.01	0.19	509.9	1901.01	-0.01	0.31	513.9	1900.50	-0.02	0.00	522.9
1899.82	-0.03	-0.48	532.9	1899.65	-0.03	-0.55	537.0	1897.99	-0.04	-2.01	547.0
1898.74	-0.05	-1.30	563.6	1899.61	-0.03	-0.47	580.1	1900.37	-0.02	0.24	596.7
1900.70	-0.01	0.53	613.3	1900.78	-0.01	0.56	629.9	1900.85	-0.01	0.59	646.4
1900.87	-0.01	0.57	663.1	1901.00	-0.01	0.40	673.0	1901.04	0.00	0.13	680.4
1901.22	0.00	-0.23	689.7	1902.00	0.00	0.00	699.0	1902.67	0.00	0.00	715.7
1903.33	0.00	0.00	732.3	1904.00	0.00	0.00	749.0				

ID  
38 SECTION 3700.00 TIME = 17.03 HRS WS =1900.65 WIDTH = 374.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1908.30	0.00	0.00	0.0	1908.00	0.00	0.00	8.0	1907.90	0.00	0.00	13.0
1907.80	0.00	0.00	17.0	1907.50	0.00	0.00	26.0	1907.40	0.00	0.00	30.0
1907.10	0.00	0.00	37.0	1906.80	0.00	0.00	47.0	1906.30	0.00	0.00	61.0
1906.00	0.00	0.00	69.0	1905.60	0.00	0.00	82.0	1905.40	0.00	0.00	86.0
1905.30	0.00	0.00	93.0	1905.00	0.00	0.00	103.0	1904.90	0.00	0.00	108.0
1904.60	0.00	0.00	119.0	1904.20	0.00	0.00	135.0	1904.10	0.00	0.00	137.0
1904.00	0.00	0.00	143.0	1903.90	0.00	0.00	150.0	1903.80	0.00	0.00	156.0
1903.70	0.00	0.00	163.0	1903.60	0.00	0.00	170.0	1903.50	0.00	0.00	173.0
1903.50	0.00	0.00	176.0	1903.40	0.00	0.00	180.0	1903.30	0.00	0.00	186.0
1903.00	0.00	0.00	199.0	1902.90	0.00	0.00	204.0	1902.80	0.00	0.00	208.0
1902.70	0.00	0.00	213.0	1902.60	0.00	0.00	221.0	1902.50	0.00	0.00	223.0
1902.40	0.00	0.00	226.0	1902.30	0.00	0.00	232.0	1902.30	0.00	0.00	234.0
1902.20	0.00	0.00	236.0	1902.20	0.00	0.00	243.0	1902.10	0.00	0.00	251.0
1902.00	0.00	0.00	262.0	1901.90	0.00	0.00	272.0	1901.70	0.00	0.00	282.0
1901.60	0.00	0.00	288.0	1901.30	0.00	0.00	299.0	1901.30	0.00	0.00	304.0
1901.20	0.00	0.00	307.0	1901.10	0.00	0.00	312.0	1901.00	0.00	0.00	320.0
1900.80	0.00	0.00	329.0	1900.70	0.00	0.00	333.0	1900.24	-0.01	-0.26	343.5
1900.22	-0.01	-0.19	346.7	1900.22	-0.01	-0.08	349.7	1900.22	-0.01	0.02	361.0
1900.21	-0.01	0.11	364.0	1900.21	-0.01	0.21	372.0	1900.22	-0.01	0.32	383.0
1900.23	0.01	0.43	387.0	1900.22	-0.01	0.42	388.9	1900.23	0.01	0.43	404.0
1900.24	0.01	0.44	419.0	1900.23	-0.01	0.33	423.1	1900.23	0.01	0.32	438.0
1900.23	0.01	0.30	453.0	1900.23	0.01	0.29	468.0	1900.22	0.01	0.27	483.0
1900.22	-0.01	0.25	498.0	1900.22	-0.01	0.23	513.0	1900.21	-0.01	0.21	528.0
1900.23	-0.01	0.29	543.6	1900.23	0.01	0.35	559.1	1900.23	-0.01	0.42	574.8
1899.74	0.02	-0.02	589.4	1899.65	0.02	-0.06	605.9	1899.69	0.02	-0.01	609.0

1899.62 0.02 0.02 617.9 1899.65 0.02 0.15 619.5 1899.63 0.02 0.43 621.9  
 1899.60 0.02 0.30 625.0 1899.63 0.02 0.53 632.0 1899.60 0.02 0.50 635.0  
 1899.59 0.02 0.59 637.0 1899.54 0.02 0.79 648.5 1898.01 0.00 -0.49 660.0  
 1898.03 0.03 -0.57 665.0 1898.01 0.03 -0.69 667.0 1898.03 0.03 -0.77 669.0  
 1898.02 0.00 -1.08 674.0 1898.01 0.03 -1.29 677.0 1898.02 0.03 -1.38 680.1  
 1898.01 0.00 -1.49 685.9 1898.03 0.00 -1.97 699.1 1898.03 0.00 -2.07 704.1  
 1900.70 0.00 0.00 709.0 1900.80 0.00 0.00 712.0 1901.00 0.00 0.00 717.0  
 1901.20 0.00 0.00 720.0 1901.40 0.00 0.00 723.0 1901.40 0.00 0.00 727.0  
 1901.30 0.00 0.00 730.0 1901.10 0.00 0.00 733.0

ID  
 37 SECTION 3600.00 TIME = 17.03 HRS WS = 1899.58 WIDTH = 400.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1905.90 0.00 0.00 0.0 1905.80 0.00 0.00 8.0 1905.60 0.00 0.00 0.00 16.0  
 1905.50 0.00 0.00 20.0 1905.50 0.00 0.00 23.0 1905.60 0.00 0.00 0.00 27.0  
 1905.50 0.00 0.00 30.0 1905.30 0.00 0.00 36.0 1905.20 0.00 0.00 0.00 39.0  
 1905.10 0.00 0.00 45.0 1904.80 0.00 0.00 54.0 1904.60 0.00 0.00 0.00 57.0  
 1904.50 0.00 0.00 60.0 1904.40 0.00 0.00 67.0 1904.30 0.00 0.00 0.00 70.0  
 1904.00 0.00 0.00 83.0 1903.80 0.00 0.00 91.0 1903.60 0.00 0.00 0.00 99.0  
 1903.50 0.00 0.00 103.0 1903.40 0.00 0.00 106.0 1903.30 0.00 0.00 0.00 112.0  
 1903.00 0.00 0.00 121.0 1902.90 0.00 0.00 127.0 1902.80 0.00 0.00 0.00 133.0  
 1902.60 0.00 0.00 141.0 1902.50 0.00 0.00 144.0 1902.40 0.00 0.00 0.00 150.0  
 1902.20 0.00 0.00 157.0 1902.00 0.00 0.00 165.0 1901.80 0.00 0.00 0.00 178.0  
 1901.60 0.00 0.00 193.0 1901.40 0.00 0.00 207.0 1901.20 0.00 0.00 0.00 215.0  
 1901.10 0.00 0.00 220.0 1901.10 0.00 0.00 227.0 1901.10 0.00 0.00 0.00 234.0  
 1901.10 0.00 0.00 236.0 1901.00 0.00 0.00 239.0 1901.00 0.00 0.00 0.00 240.0  
 1900.90 0.00 0.00 244.0 1900.80 0.00 0.00 252.0 1900.70 0.00 0.00 0.00 255.0  
 1900.70 0.00 0.00 258.0 1900.60 0.00 0.00 260.0 1900.60 0.00 0.00 0.00 262.0  
 1900.60 0.00 0.00 266.0 1900.50 0.00 0.00 270.0 1900.50 0.00 0.00 0.00 273.0  
 1900.40 0.00 0.00 278.0 1900.10 0.00 0.00 293.0 1900.07 0.00 0.00 0.00 309.0  
 1900.03 0.00 0.00 325.0 1900.00 0.00 0.00 341.0 1899.59 0.00 0.09 0.09 355.9  
 1899.50 0.01 0.30 362.8 1899.40 0.00 0.30 365.9 1899.38 0.00 0.48 0.48 368.6  
 1899.36 0.00 0.46 371.0 1899.36 0.00 0.56 373.0 1899.36 0.00 0.66 0.66 375.0  
 1899.36 0.00 0.66 379.0 1899.35 0.00 0.65 382.0 1899.35 0.00 0.75 0.75 384.0  
 1899.42 0.00 0.82 388.0 1899.34 0.00 0.84 390.0 1899.34 0.00 0.84 0.84 392.0  
 1899.42 0.00 0.92 395.0 1899.40 0.00 0.90 405.0 1899.32 0.00 0.82 0.82 407.1  
 1899.32 0.00 0.72 412.0 1899.40 0.00 0.80 415.0 1899.40 0.00 0.80 0.80 417.1  
 1899.40 0.00 0.70 420.0 1899.39 0.00 0.69 423.1 1899.38 0.00 0.58 0.58 427.0  
 1899.38 0.00 0.58 429.1 1899.38 0.00 0.48 432.2 1899.33 0.00 0.33 0.33 436.3  
 1899.32 0.00 0.22 440.0 1899.31 0.00 0.21 443.0 1899.31 0.00 0.21 0.21 445.2  
 1899.31 0.00 0.11 449.0 1899.31 0.00 0.11 452.0 1899.30 0.00 0.11 0.11 457.0  
 1899.29 -0.01 0.09 469.0 1899.29 -0.01 0.09 473.0 1899.32 0.00 0.12 0.12 476.1  
 1899.31 -0.01 0.01 479.2 1899.43 0.00 0.03 482.0 1899.43 0.00 0.03 0.03 488.0  
 1899.43 0.00 0.03 490.0 1899.42 0.00 0.02 496.0 1899.42 0.00 0.02 0.02 498.0  
 1899.28 -0.01 -0.02 500.8 1899.31 -0.01 0.01 503.0 1899.29 -0.01 0.09 0.09 504.9  
 1899.24 -0.01 0.04 508.0 1899.23 -0.01 0.13 509.8 1899.22 -0.01 0.12 0.12 513.0  
 1899.18 -0.01 0.18 515.7 1899.25 -0.01 0.45 520.7 1899.24 -0.01 0.54 0.54 525.9  
 1899.25 -0.01 0.55 528.0 1899.24 -0.01 0.64 532.9 1899.23 -0.01 0.83 0.83 541.9  
 1899.22 -0.01 0.82 544.0 1899.21 -0.01 0.91 546.9 1899.20 -0.01 1.00 1.00 551.0  
 1899.20 -0.01 1.00 553.0 1899.16 -0.01 0.98 568.8 1899.14 -0.01 0.98 0.98 584.6  
 1899.10 -0.01 0.96 600.3 1899.07 -0.01 0.95 616.1 1899.05 -0.01 0.96 0.96 631.9  
 1898.87 -0.02 0.80 647.7 1898.63 -0.02 0.59 663.4 1898.34 -0.03 0.32 0.32 679.2  
 1897.18 -0.06 -0.82 695.1 1897.67 -0.05 -0.78 711.6 1897.79 -0.04 -1.11 728.3  
 1898.40 -0.03 -0.95 744.4 1899.80 0.00 0.00 760.0 1900.00 0.00 0.00 0.00 767.0  
 1900.50 0.00 0.00 772.0 1901.00 0.00 0.00 776.0 1901.20 0.00 0.00 0.00 782.0  
 1901.30 0.00 0.00 785.0 1901.30 0.00 0.00 788.0 1901.30 0.00 0.00 0.00 794.0  
 1901.30 0.00 0.00 796.0 1901.20 0.00 0.00 799.0

ID  
 36 SECTION 3500.00 TIME = 17.03 HRS WS = 1898.58 WIDTH = 479.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1904.50	0.00	0.00	0.0	1904.25	0.00	0.00	12.0	1904.00	0.00	0.00	24.0
1903.70	0.00	0.00	35.0	1903.40	0.00	0.00	46.0	1903.30	0.00	0.00	53.0
1903.20	0.00	0.00	59.0	1903.00	0.00	0.00	64.0	1902.90	0.00	0.00	71.0
1902.70	0.00	0.00	80.0	1902.60	0.00	0.00	88.0	1902.40	0.00	0.00	95.0
1902.20	0.00	0.00	106.0	1901.90	0.00	0.00	116.0	1901.80	0.00	0.00	125.0
1901.50	0.00	0.00	139.0	1901.30	0.00	0.00	152.0	1901.10	0.00	0.00	159.0
1901.10	0.00	0.00	163.0	1901.00	0.00	0.00	167.0	1900.90	0.00	0.00	172.0
1900.90	0.00	0.00	175.0	1900.80	0.00	0.00	179.0	1900.70	0.00	0.00	184.0
1900.60	0.00	0.00	187.0	1900.60	0.00	0.00	190.0	1900.60	0.00	0.00	193.0
1900.50	0.00	0.00	195.0	1900.60	0.00	0.00	198.0	1900.50	0.00	0.00	211.3
1900.40	0.00	0.00	224.7	1900.30	0.00	0.00	238.0	1900.30	0.00	0.00	244.0
1900.10	0.00	0.00	257.0	1899.90	0.00	0.00	271.0	1899.60	0.00	0.00	282.0
1899.20	0.00	0.00	293.0	1899.00	0.00	0.00	297.0	1899.00	0.00	0.00	303.0
1898.90	0.00	0.00	312.0	1898.80	0.00	0.00	317.0	1898.56	0.00	0.00	327.0
1898.52	0.01	0.22	337.0	1898.46	0.01	0.46	349.1	1898.45	0.01	0.65	358.0
1898.29	0.01	0.59	365.0	1898.28	0.01	0.58	368.0	1898.24	0.01	0.64	371.9
1898.23	0.01	0.73	375.9	1898.22	0.01	0.72	382.0	1898.21	0.01	0.71	388.0
1898.21	0.01	0.81	390.0	1898.20	0.01	0.90	395.0	1898.20	0.01	0.89	400.0
1898.18	0.01	0.78	408.0	1898.18	0.01	0.68	411.1	1898.17	0.01	0.57	415.0
1898.17	0.01	0.57	417.2	1898.24	0.01	0.54	424.0	1898.23	0.01	0.53	430.0
1898.22	0.01	0.42	438.0	1898.22	0.01	0.52	441.0	1898.21	0.01	0.51	445.0
1898.21	0.01	0.51	450.0	1898.20	0.01	0.40	453.0	1898.17	0.01	0.37	456.2
1898.25	0.01	0.35	460.1	1898.30	0.01	0.20	464.1	1898.31	0.01	0.11	469.0
1898.20	0.01	0.00	478.2	1898.43	0.01	0.13	481.0	1898.42	0.01	0.12	489.0
1898.42	0.01	0.12	493.0	1898.42	0.01	0.12	499.0	1898.18	0.01	-0.02	504.8
1898.29	0.01	0.09	511.0	1898.29	0.01	0.09	517.0	1898.27	0.01	0.17	521.9
1898.25	0.01	0.25	525.0	1897.98	0.02	0.18	530.8	1897.85	0.02	0.25	536.8
1897.72	0.02	0.32	539.8	1897.91	0.02	0.61	544.0	1897.87	0.02	0.67	547.0
1897.73	0.02	0.63	550.0	1896.85	0.03	0.05	553.1	1896.55	0.03	-0.25	555.0
1896.33	0.03	-0.37	557.0	1896.30	0.03	-0.40	559.0	1896.07	0.03	-0.63	576.0
1896.03	0.03	-0.67	578.0	1896.03	0.03	-0.67	580.0	1896.30	0.03	-0.50	582.0
1896.33	0.03	-0.47	585.0	1896.36	0.03	-0.44	587.0	1896.41	0.03	-0.39	591.0
1896.45	0.03	-0.35	595.0	1896.50	0.03	-0.30	598.0	1897.64	0.02	0.54	611.0
1897.93	0.02	0.63	622.0	1897.95	0.02	0.55	630.0	1897.98	0.02	0.48	645.1
1898.02	0.02	0.42	660.0	1898.03	0.02	0.44	667.0	1898.04	0.02	0.54	668.9
1898.06	0.02	0.62	681.3	1898.08	0.02	0.72	693.6	1898.11	0.02	0.81	706.0
1898.12	0.02	0.82	713.0	1898.13	0.02	0.73	719.0	1898.14	0.02	0.64	726.1
1898.16	0.02	0.56	732.2	1898.23	0.01	0.53	738.0	1898.24	0.01	0.53	745.0
1898.29	0.01	0.49	760.8	1898.47	0.01	0.57	776.2	1898.54	0.01	0.54	791.9
1898.54	0.01	0.04	803.5	1899.00	0.00	0.00	815.0				

ID  
 35 SECTION 3400.00 TIME = 17.03 HRS WS = 1897.58 WIDTH = 449.3

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1903.00	0.00	0.00	0.0	1902.80	0.00	0.00	5.0	1902.80	0.00	0.00	8.0
1902.60	0.00	0.00	17.0	1902.60	0.00	0.00	19.0	1902.40	0.00	0.00	26.0
1902.40	0.00	0.00	30.0	1902.20	0.00	0.00	37.0	1902.00	0.00	0.00	48.0
1901.80	0.00	0.00	53.0	1901.70	0.00	0.00	60.0	1901.70	0.00	0.00	64.0
1901.60	0.00	0.00	66.0	1901.60	0.00	0.00	68.0	1901.50	0.00	0.00	72.0
1901.40	0.00	0.00	78.0	1901.20	0.00	0.00	85.0	1901.20	0.00	0.00	90.0
1901.00	0.00	0.00	98.0	1900.70	0.00	0.00	113.0	1900.45	0.00	0.00	122.0
1900.20	0.00	0.00	131.0	1900.20	0.00	0.00	134.0	1900.10	0.00	0.00	136.0
1900.05	0.00	0.00	145.5	1900.00	0.00	0.00	155.0	1899.80	0.00	0.00	164.0
1899.60	0.00	0.00	173.0	1899.60	0.00	0.00	179.0	1899.50	0.00	0.00	181.0
1899.50	0.00	0.00	184.0	1899.40	0.00	0.00	188.0	1899.40	0.00	0.00	190.0
1899.30	0.00	0.00	196.0	1899.30	0.00	0.00	200.0	1899.20	0.00	0.00	205.0
1899.30	0.00	0.00	220.0	1899.30	0.00	0.00	222.0	1899.40	0.00	0.00	227.0

1899.40	0.00	0.00	229.0	1899.40	0.00	0.00	233.0	1899.40	0.00	0.00	237.0
1899.40	0.00	0.00	240.0	1899.50	0.00	0.00	242.0	1899.50	0.00	0.00	244.0
1899.50	0.00	0.00	248.0	1899.40	0.00	0.00	258.0	1899.30	0.00	0.00	261.0
1899.30	0.00	0.00	265.0	1899.20	0.00	0.00	268.0	1899.20	0.00	0.00	270.0
1899.10	0.00	0.00	274.0	1899.00	0.00	0.00	277.0	1898.90	0.00	0.00	285.0
1898.80	0.00	0.00	289.0	1898.45	0.00	0.00	303.8	1898.10	0.00	0.00	318.7
1897.75	0.00	0.00	333.5	1897.08	-0.01	-0.32	347.8	1897.08	0.00	0.03	362.7
1897.07	0.00	0.37	377.9	1897.07	0.00	0.57	384.0	1897.06	0.00	0.67	392.0
1897.07	0.00	0.77	396.0	1897.06	0.00	0.86	400.0	1897.06	0.00	0.96	402.0
1897.06	0.00	0.96	404.0	1897.06	0.00	0.96	411.0	1897.06	0.00	0.96	413.0
1897.06	0.00	0.86	416.0	1897.05	0.00	0.75	421.1	1897.05	0.00	0.50	432.1
1897.05	0.00	0.25	443.0	1897.05	0.00	0.25	445.0	1897.04	0.00	0.14	451.0
1897.04	0.00	0.04	455.0	1897.05	0.00	0.05	459.1	1897.05	0.00	-0.05	461.1
1897.04	0.00	-0.16	466.0	1897.04	0.00	-0.16	468.0	1897.04	0.00	-0.16	472.2
1897.04	0.00	-0.26	476.0	1897.04	0.00	-0.26	482.0	1897.04	0.00	-0.26	484.2
1897.05	0.00	-0.35	501.0	1897.03	0.00	-0.27	503.7	1897.03	0.00	-0.07	520.3
1897.02	0.00	0.12	536.9	1897.02	0.00	0.22	539.9	1897.04	0.00	0.44	547.9
1897.03	0.00	0.53	550.9	1897.02	0.00	0.59	566.4	1897.03	0.00	0.68	581.8
1897.03	0.00	0.74	597.3	1897.02	0.00	0.81	612.7	1897.02	0.00	0.88	628.1
1897.01	-0.01	0.94	643.6	1897.01	-0.01	1.01	659.0	1897.01	-0.01	1.01	670.0
1897.01	-0.01	1.01	684.0	1897.00	-0.01	0.80	691.0	1897.00	-0.01	0.70	698.0
1896.99	-0.01	0.59	703.0	1897.00	-0.01	0.60	708.0	1897.00	-0.01	0.50	712.0
1896.99	-0.01	0.50	718.0	1897.00	-0.01	0.50	722.0	1897.00	-0.01	0.50	727.0
1897.00	-0.01	0.60	729.0	1896.99	-0.01	0.70	733.0	1896.99	-0.01	0.84	744.5
1895.33	-0.02	-0.67	756.1	1895.36	-0.02	-1.39	771.1	1897.20	-0.02	-0.30	784.3
1897.70	0.00	0.00	787.0	1898.00	0.00	0.00	793.0	1898.80	0.00	0.00	799.0

## ID

34 SECTION 3300.00 TIME = 17.03 HRS WS = 1896.68 WIDTH = 462.4

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1901.90	0.00	0.00	0.0	1901.80	0.00	0.00	4.0	1901.50	0.00	0.00	13.0
1901.30	0.00	0.00	20.0	1901.20	0.00	0.00	24.0	1901.20	0.00	0.00	27.0
1901.20	0.00	0.00	29.0	1901.10	0.00	0.00	31.0	1901.10	0.00	0.00	32.0
1901.10	0.00	0.00	33.0	1901.10	0.00	0.00	34.0	1901.10	0.00	0.00	36.0
1901.00	0.00	0.00	37.0	1901.00	0.00	0.00	39.0	1900.90	0.00	0.00	41.0
1900.90	0.00	0.00	43.0	1900.70	0.00	0.00	50.0	1900.60	0.00	0.00	53.0
1900.30	0.00	0.00	62.0	1900.30	0.00	0.00	65.0	1900.10	0.00	0.00	74.0
1900.00	0.00	0.00	76.0	1899.90	0.00	0.00	83.0	1899.70	0.00	0.00	90.0
1899.70	0.00	0.00	92.0	1899.60	0.00	0.00	95.0	1899.60	0.00	0.00	98.0
1899.50	0.00	0.00	109.0	1899.50	0.00	0.00	110.0	1899.50	0.00	0.00	111.0
1899.50	0.00	0.00	112.0	1899.40	0.00	0.00	114.0	1899.40	0.00	0.00	115.0
1899.40	0.00	0.00	117.0	1899.30	0.00	0.00	120.0	1899.20	0.00	0.00	126.0
1899.20	0.00	0.00	128.0	1899.20	0.00	0.00	130.0	1899.10	0.00	0.00	135.0
1899.10	0.00	0.00	137.0	1899.00	0.00	0.00	142.0	1899.00	0.00	0.00	144.0
1898.90	0.00	0.00	159.0	1898.90	0.00	0.00	163.0	1898.90	0.00	0.00	164.0
1898.80	0.00	0.00	170.0	1898.70	0.00	0.00	176.0	1898.60	0.00	0.00	183.0
1898.50	0.00	0.00	186.0	1898.40	0.00	0.00	189.0	1898.20	0.00	0.00	195.0
1898.10	0.00	0.00	200.0	1898.05	0.00	0.00	209.0	1898.00	0.00	0.00	218.0
1897.80	0.00	0.00	225.0	1897.80	0.00	0.00	229.0	1897.80	0.00	0.00	232.0
1897.80	0.00	0.00	236.0	1897.80	0.00	0.00	237.0	1897.90	0.00	0.00	239.0
1897.90	0.00	0.00	240.0	1898.00	0.00	0.00	241.0	1898.10	0.00	0.00	244.0
1898.10	0.00	0.00	246.0	1898.20	0.00	0.00	249.0	1898.20	0.00	0.00	250.0
1898.20	0.00	0.00	252.0	1898.20	0.00	0.00	253.0	1898.20	0.00	0.00	258.0
1898.30	0.00	0.00	260.0	1898.30	0.00	0.00	267.0	1898.20	0.00	0.00	276.0
1898.10	0.00	0.00	288.5	1898.00	0.00	0.00	301.0	1897.70	0.00	0.00	307.0
1897.60	0.00	0.00	311.0	1897.10	0.00	0.00	323.0	1896.44	-0.01	-0.11	335.3
1896.33	0.00	0.33	347.6	1896.27	0.00	0.38	349.9	1896.27	0.00	0.37	352.0
1896.27	0.00	0.47	355.0	1896.27	0.00	0.47	356.0	1896.27	0.00	0.47	359.0
1896.27	0.00	0.47	364.0	1896.26	0.00	0.56	366.0	1896.26	0.00	0.56	370.0
1896.27	0.00	0.57	374.0	1896.26	0.00	0.66	377.0	1896.25	0.00	0.65	379.0

1896.26	0.00	0.66	380.0	1896.26	0.00	0.75	382.0	1896.25	0.00	0.75	385.0
1896.25	0.00	0.75	387.0	1896.24	0.00	0.74	390.0	1896.24	0.00	0.74	392.0
1896.24	0.00	0.74	395.0	1896.24	0.00	0.74	397.0	1896.24	0.00	0.74	398.0
1896.24	0.00	0.74	399.0	1896.23	0.00	0.73	407.0	1896.23	0.00	0.73	410.0
1896.23	0.00	0.73	422.0	1896.23	0.00	0.63	424.0	1896.23	0.00	0.53	428.0
1896.23	0.00	0.42	429.0	1896.22	0.00	0.42	430.0	1896.22	0.00	0.42	433.0
1896.22	0.00	0.42	435.0	1896.22	0.00	0.32	438.0	1896.21	0.00	0.31	440.0
1896.21	0.00	0.31	443.0	1896.21	0.00	0.26	457.6	1896.19	0.00	0.19	472.0
1896.18	0.00	0.08	486.8	1896.19	0.00	-0.01	501.4	1896.17	0.00	-0.13	516.0
1896.18	0.00	-0.02	518.9	1896.15	0.00	-0.05	521.0	1896.17	0.00	0.07	525.9
1896.16	0.00	0.06	529.0	1896.17	0.00	0.07	530.0	1896.16	0.00	0.07	533.0
1896.15	0.00	0.06	548.3	1896.15	0.00	0.07	563.6	1896.11	0.00	0.04	578.9
1896.12	0.00	0.06	594.2	1896.10	0.00	0.05	609.5	1896.09	0.00	0.05	624.8
1896.09	0.00	0.06	640.1	1896.07	0.00	0.05	655.4	1896.06	0.00	0.05	670.7
1896.02	0.00	0.02	686.0	1896.02	0.00	0.02	687.0	1896.02	0.00	0.12	688.9
1896.01	0.00	0.21	692.0	1896.01	0.00	0.41	695.0	1895.99	0.00	0.59	697.0
1895.92	0.01	0.62	699.0	1895.91	0.01	0.61	700.0	1895.36	0.01	0.26	701.0
1895.05	0.01	0.05	702.0	1894.74	0.01	-0.16	703.0	1894.62	0.01	-0.28	715.0
1894.62	0.01	-0.28	718.0	1894.95	0.01	-0.05	719.0	1895.51	0.01	0.31	728.0
1895.54	0.01	0.14	737.0	1895.54	0.01	0.04	738.0	1895.55	0.01	0.05	739.0
1895.56	0.01	0.06	740.0	1895.55	0.01	0.05	741.0	1895.57	0.01	-0.09	754.4
1895.58	0.01	-0.26	767.8	1895.62	0.01	-0.38	781.0	1895.61	0.01	-0.09	784.9
1895.77	0.01	-0.23	789.4	1896.58	0.00	0.08	792.0	1896.62	0.00	0.03	793.0
1898.10	0.00	0.00	799.0								

ID  
33 SECTION 3200.00 TIME = 17.03 HRS WS = 1895.58 WIDTH = 441.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1901.80	0.00	0.00	0.0	1901.10	0.00	0.00	17.0	1900.70	0.00	0.00	28.0
1900.30	0.00	0.00	36.0	1899.90	0.00	0.00	50.0	1899.70	0.00	0.00	58.0
1899.70	0.00	0.00	60.0	1899.60	0.00	0.00	62.0	1899.40	0.00	0.00	71.0
1899.20	0.00	0.00	75.0	1899.10	0.00	0.00	82.0	1899.00	0.00	0.00	88.0
1898.90	0.00	0.00	92.0	1898.90	0.00	0.00	95.0	1898.80	0.00	0.00	101.0
1898.70	0.00	0.00	105.0	1898.60	0.00	0.00	108.0	1898.40	0.00	0.00	116.0
1898.20	0.00	0.00	123.0	1898.20	0.00	0.00	127.0	1898.00	0.00	0.00	137.0
1897.90	0.00	0.00	147.0	1897.80	0.00	0.00	162.0	1897.70	0.00	0.00	177.0
1897.60	0.00	0.00	192.0	1897.35	0.00	0.00	204.0	1897.10	0.00	0.00	216.0
1896.90	0.00	0.00	226.0	1896.80	0.00	0.00	232.0	1896.70	0.00	0.00	246.0
1896.70	0.00	0.00	248.0	1896.00	0.00	0.00	264.0	1896.20	0.00	0.00	273.0
1896.40	0.00	0.00	285.0	1896.40	0.00	0.00	297.0	1896.40	0.00	0.00	302.0
1896.30	0.00	0.00	309.0	1896.00	0.00	0.00	314.0	1895.90	0.00	0.00	318.0
1895.80	0.00	0.00	332.0	1895.57	0.00	-0.13	333.9	1895.45	0.00	-0.15	341.9
1895.46	0.00	-0.04	349.9	1895.45	0.00	0.05	356.0	1895.46	0.00	0.31	372.4
1895.43	0.00	0.53	389.0	1895.42	0.00	0.52	394.0	1895.37	0.00	0.57	398.0
1895.37	0.00	0.57	400.0	1895.31	0.00	0.61	402.0	1895.31	0.00	0.61	405.0
1895.30	0.00	0.60	408.0	1895.24	0.00	0.64	411.0	1895.23	0.00	0.63	413.0
1895.23	0.00	0.63	417.0	1895.21	0.00	0.61	423.0	1895.20	0.00	0.60	429.0
1895.25	0.00	0.55	434.0	1895.32	0.00	0.51	436.0	1895.37	0.00	0.47	444.0
1895.41	0.00	0.41	446.0	1895.40	0.00	0.30	450.0	1895.40	0.00	0.30	453.0
1895.40	0.00	0.29	456.0	1895.39	0.00	0.29	460.0	1895.38	0.00	0.28	464.0
1895.38	0.00	0.18	467.1	1895.47	0.00	0.16	470.0	1895.45	0.00	0.05	472.0
1895.45	0.00	0.05	474.0	1895.45	0.00	0.05	477.0	1895.47	0.00	-0.04	480.0
1895.45	0.00	-0.05	482.0	1895.44	0.00	-0.06	485.0	1895.44	0.00	-0.06	488.0
1895.44	0.00	-0.06	490.0	1895.44	0.00	0.04	495.0	1895.44	0.00	-0.06	499.0
1895.46	0.00	-0.04	504.0	1895.46	0.00	-0.04	508.0	1895.46	0.00	0.06	511.0
1895.46	0.00	0.06	516.0	1895.42	0.00	0.12	519.0	1895.45	0.00	0.15	523.0
1895.29	0.00	0.09	525.9	1895.31	0.00	0.10	529.0	1895.26	0.00	0.16	533.0
1895.27	0.00	0.17	535.0	1895.23	0.00	0.23	538.0	1895.10	-0.01	0.21	543.0
1895.09	-0.01	0.19	547.0	1895.08	-0.01	0.18	550.0	1895.04	-0.01	0.14	557.0
1895.16	-0.01	0.16	560.0	1895.14	-0.01	0.14	564.0	1894.91	-0.01	0.01	580.0

1895.06	-0.01	0.06	583.0	1895.05	-0.01	0.05	585.0	1895.03	-0.01	0.03	589.0
1895.12	-0.01	0.02	592.0	1895.11	-0.01	0.01	595.0	1895.03	-0.01	-0.07	597.0
1895.12	-0.01	-0.08	599.0	1895.10	-0.01	-0.10	604.0	1895.08	-0.01	-0.12	606.1
1895.39	0.00	0.09	608.0	1895.39	0.00	0.09	610.0	1895.29	0.00	-0.01	612.0
1895.44	0.00	0.04	616.0	1895.28	-0.01	-0.02	618.0	1895.38	0.00	0.07	620.0
1895.37	0.00	0.07	622.0	1895.37	0.00	0.07	624.0	1895.36	0.00	0.06	628.0
1895.36	0.00	0.06	633.0	1894.94	-0.01	-0.26	640.9	1894.92	-0.01	-0.28	650.0
1894.90	-0.01	-0.30	655.0	1894.88	-0.01	-0.32	658.0	1894.83	-0.01	-0.37	664.1
1895.30	-0.01	0.00	667.0	1895.16	-0.01	-0.14	669.0	1895.42	0.00	0.02	671.0
1895.41	0.00	0.01	673.0	1895.41	0.00	0.01	676.0	1895.41	0.00	-0.09	679.0
1895.41	0.00	0.01	682.0	1895.41	0.00	-0.09	684.0	1895.40	0.00	-0.10	688.0
1895.40	0.00	0.01	691.0	1895.40	0.00	0.00	693.0	1895.40	0.00	0.00	695.0
1895.40	0.00	0.00	697.0	1895.06	-0.01	-0.24	699.0	1895.23	-0.01	-0.07	702.0
1894.58	-0.02	-0.62	705.9	1894.16	-0.03	-0.94	708.0	1894.57	-0.02	-0.53	712.0
1893.74	-0.04	-1.26	715.0	1893.67	-0.04	-1.33	719.0	1892.83	-0.06	-2.12	735.0
1892.19	-0.12	-2.71	751.0	1891.93	-0.12	-2.87	756.0	1891.82	-0.12	-2.88	760.0
1894.55	-0.03	0.05	767.0	1895.32	0.00	0.92	772.0	1895.97	0.00	0.00	780.0

ID  
 32 SECTION 3100.00 TIME = 17.03 HRS WS=1894.76 WIDTH = 364.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1900.40	0.00	0.00	0.0	1900.00	0.00	0.00	8.0	1899.60	0.00	0.00	20.0
1899.30	0.00	0.00	30.0	1899.20	0.00	0.00	34.0	1899.00	0.00	0.00	41.0
1898.80	0.00	0.00	47.0	1898.60	0.00	0.00	55.0	1898.20	0.00	0.00	69.0
1898.00	0.00	0.00	77.0	1897.70	0.00	0.00	86.0	1897.60	0.00	0.00	94.0
1897.50	0.00	0.00	97.0	1897.40	0.00	0.00	102.0	1897.30	0.00	0.00	105.0
1897.20	0.00	0.00	108.0	1897.20	0.00	0.00	110.0	1897.10	0.00	0.00	114.0
1897.10	0.00	0.00	116.0	1897.00	0.00	0.00	119.0	1897.00	0.00	0.00	122.0
1897.00	0.00	0.00	124.0	1897.10	0.00	0.00	126.0	1897.20	0.00	0.00	129.0
1897.20	0.00	0.00	131.0	1897.20	0.00	0.00	139.0	1897.20	0.00	0.00	146.0
1897.10	0.00	0.00	151.0	1897.10	0.00	0.00	157.0	1897.10	0.00	0.00	160.0
1897.00	0.00	0.00	163.0	1897.00	0.00	0.00	166.0	1896.90	0.00	0.00	171.0
1896.90	0.00	0.00	175.0	1896.80	0.00	0.00	177.0	1896.80	0.00	0.00	180.0
1896.80	0.00	0.00	184.0	1896.70	0.00	0.00	187.0	1896.70	0.00	0.00	190.0
1896.70	0.00	0.00	193.0	1896.60	0.00	0.00	197.0	1896.70	0.00	0.00	204.0
1896.70	0.00	0.00	212.0	1896.70	0.00	0.00	214.0	1896.80	0.00	0.00	217.0
1896.80	0.00	0.00	221.0	1896.80	0.00	0.00	227.0	1896.80	0.00	0.00	233.0
1896.70	0.00	0.00	239.0	1896.70	0.00	0.00	243.0	1896.60	0.00	0.00	254.0
1896.50	0.00	0.00	261.0	1896.40	0.00	0.00	271.0	1896.20	0.00	0.00	278.0
1896.00	0.00	0.00	284.0	1895.90	0.00	0.00	289.0	1895.60	0.00	0.00	299.5
1895.30	0.00	0.00	310.0	1895.00	0.00	0.00	327.0	1893.42	-0.01	-1.28	338.3
1893.45	0.01	-1.15	342.9	1893.44	0.01	-1.15	348.0	1893.44	0.01	-1.06	351.0
1893.44	0.01	-0.96	362.0	1893.45	0.01	-0.85	368.0	1893.44	0.01	-0.66	379.0
1893.43	0.01	-0.57	388.0	1893.06	0.02	-0.84	395.0	1892.98	0.02	-0.92	402.0
1892.91	0.02	-0.99	408.0	1892.89	0.02	-1.01	410.0	1892.43	0.02	-1.37	412.0
1892.35	0.02	-1.45	418.0	1892.24	0.02	-1.56	426.0	1892.18	0.02	-1.62	431.0
1891.75	0.02	-1.95	437.0	1892.14	0.02	-1.66	440.0	1892.20	0.02	-1.60	445.0
1893.20	0.02	-0.80	453.0	1893.25	0.02	-0.75	458.0	1893.74	0.01	-0.36	464.0
1894.14	0.01	-0.06	466.0	1894.51	0.01	0.21	470.0	1894.52	0.01	0.22	472.0
1894.53	0.01	0.23	475.0	1894.21	0.01	0.01	478.0	1894.24	0.01	0.04	483.0
1894.26	0.01	0.06	486.0	1893.92	0.01	-0.18	490.0	1893.94	0.01	-0.16	493.0
1893.83	0.01	-0.22	502.0	1893.73	0.01	-0.28	511.0	1894.07	0.01	-0.03	513.0
1894.28	0.01	0.13	522.0	1894.47	0.01	0.27	531.0	1894.23	0.01	0.13	541.0
1894.25	0.01	0.15	545.0	1894.16	0.01	0.11	554.0	1894.08	0.01	0.08	563.0
1894.36	0.01	0.26	567.0	1894.53	0.01	0.33	572.0	1894.43	0.01	0.13	577.2
1894.73	0.00	0.33	582.0	1894.74	0.00	0.34	588.0	1894.71	0.00	0.31	594.0
1894.46	0.01	0.16	596.9	1894.53	0.01	0.33	600.0	1894.52	0.01	0.41	604.0
1894.52	0.01	0.42	606.0	1894.42	0.01	0.22	609.1	1894.71	0.00	0.41	612.0
1894.72	0.00	0.42	621.0	1894.40	0.01	0.21	623.8	1894.55	0.01	0.35	628.0
1894.54	0.01	0.34	635.0	1894.56	0.01	0.46	646.0	1894.57	0.01	0.47	651.1

1894.73 0.00 0.53 656.0 1894.73 0.00 0.43 658.0 1894.72 0.00 0.32 662.0  
 1894.73 0.00 0.33 666.0 1894.73 0.00 0.23 668.0 1894.74 0.00 0.14 672.0  
 1894.73 0.00 0.13 677.0 1894.73 0.00 0.14 680.0 1894.73 0.00 0.13 689.0  
 1894.74 0.00 0.14 693.1 1894.86 0.00 0.16 695.0 1895.13 0.00 0.00 701.0

ID  
 31 SECTION 3000.00 TIME = 17.03 HRS WS = 1894.00 WIDTH = 413.3

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1900.80 0.00 0.00 0.0 1900.00 0.00 0.00 12.0 1899.33 0.00 0.00 0.00 25.3  
 1898.67 0.00 0.00 38.7 1898.00 0.00 0.00 52.0 1897.50 0.00 0.00 0.00 69.0  
 1896.90 0.00 0.00 84.0 1896.55 0.00 0.00 94.5 1896.20 0.00 0.00 0.00 105.0  
 1896.00 0.00 0.00 112.0 1895.90 0.00 0.00 119.0 1895.80 0.00 0.00 0.00 124.0  
 1895.70 0.00 0.00 129.0 1895.60 0.00 0.00 132.0 1895.50 0.00 0.00 0.00 135.0  
 1895.50 0.00 0.00 137.0 1895.50 0.00 0.00 144.0 1895.60 0.00 0.00 0.00 148.0  
 1895.70 0.00 0.00 150.0 1895.80 0.00 0.00 156.0 1895.80 0.00 0.00 0.00 159.0  
 1895.80 0.00 0.00 165.0 1895.90 0.00 0.00 172.0 1895.90 0.00 0.00 0.00 178.0  
 1895.80 0.00 0.00 191.0 1895.80 0.00 0.00 194.0 1895.70 0.00 0.00 0.00 208.0  
 1895.60 0.00 0.00 210.0 1895.50 0.00 0.00 218.0 1895.40 0.00 0.00 0.00 222.0  
 1895.40 0.00 0.00 235.0 1895.40 0.00 0.00 248.0 1895.40 0.00 0.00 0.00 253.0  
 1895.40 0.00 0.00 255.0 1895.50 0.00 0.00 257.0 1895.30 0.00 0.00 0.00 269.0  
 1895.30 0.00 0.00 272.0 1895.20 0.00 0.00 275.0 1895.00 0.00 0.00 0.00 280.0  
 1894.90 0.00 0.00 282.0 1894.70 0.00 0.00 287.0 1894.50 0.00 0.00 0.00 292.0  
 1893.80 0.00 -0.20 303.8 1893.58 0.00 -0.22 315.7 1893.19 0.01 -0.41 327.6  
 1893.13 0.01 -0.27 341.9 1893.12 0.01 -0.08 355.0 1893.09 0.01 -0.11 359.0  
 1893.06 0.01 -0.04 367.0 1893.07 0.01 0.07 375.0 1893.06 0.01 0.06 380.0  
 1893.02 0.01 0.02 385.0 1893.00 0.01 0.00 388.0 1892.66 0.01 -0.24 393.0  
 1892.61 0.01 -0.29 398.0 1892.21 0.01 -0.59 400.0 1892.11 0.01 -0.69 408.0  
 1892.07 0.01 -0.73 411.0 1891.53 0.01 -1.17 417.0 1891.48 0.01 -1.22 420.0  
 1891.45 0.01 -1.25 422.0 1891.37 0.01 -1.33 426.0 1891.29 0.01 -1.41 431.0  
 1891.25 0.01 -1.45 433.0 1891.25 0.01 -1.45 436.0 1891.80 0.01 -1.00 439.0  
 1891.84 0.01 -0.96 442.0 1891.87 0.01 -0.93 444.0 1892.36 0.01 -0.54 447.0  
 1891.94 0.01 -0.86 449.0 1893.09 0.01 -0.01 465.0 1893.35 0.01 0.15 469.0  
 1893.71 0.00 0.41 474.0 1893.71 0.00 0.41 477.0 1893.70 0.00 0.40 480.0  
 1893.79 0.00 0.39 483.0 1893.80 0.00 0.40 485.0 1893.80 0.00 0.30 488.0  
 1893.79 0.00 0.39 490.0 1893.80 0.00 0.30 493.1 1893.83 0.00 0.23 496.0  
 1893.81 0.00 0.21 500.0 1893.81 0.00 0.31 503.9 1893.82 0.00 0.32 506.0  
 1893.82 0.00 0.42 509.0 1893.83 0.00 0.43 513.0 1893.78 0.00 0.47 519.0  
 1893.44 0.01 0.34 534.0 1893.55 0.01 0.41 545.3 1893.60 0.00 0.43 556.7  
 1893.73 0.00 0.53 568.0 1893.75 0.00 0.55 579.0 1893.61 0.00 0.51 581.0  
 1893.62 0.00 0.52 584.0 1893.57 0.00 0.57 588.0 1893.66 0.00 0.56 599.0  
 1893.85 0.00 0.55 604.0 1893.85 0.00 0.55 607.0 1893.87 0.00 0.52 620.8  
 1893.87 0.00 0.47 634.5 1893.87 0.00 0.42 648.2 1893.88 0.00 0.38 662.0  
 1893.89 0.00 0.39 665.1 1893.88 0.00 0.28 667.0 1893.88 0.00 0.28 669.0  
 1893.88 0.00 0.28 672.0 1893.89 0.00 0.24 682.1 1893.89 0.00 0.19 692.0  
 1893.79 0.00 0.09 695.0 1893.87 0.00 0.17 698.1 1893.88 0.00 0.08 700.0  
 1893.88 0.00 0.08 703.0 1893.88 0.00 0.08 706.0 1893.90 0.00 0.10 710.1  
 1894.03 0.00 0.23 714.9 1894.27 0.00 0.00 719.0

ID  
 30 SECTION 2900.00 TIME = 17.03 HRS WS = 1892.60 WIDTH = 347.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1901.10 0.00 0.00 0.0 1900.30 0.00 0.00 8.0 1900.00 0.00 0.00 0.00 11.0  
 1899.70 0.00 0.00 18.0 1899.20 0.00 0.00 30.0 1898.90 0.00 0.00 0.00 37.0  
 1898.10 0.00 0.00 49.0 1897.90 0.00 0.00 54.0 1897.70 0.00 0.00 0.00 57.0  
 1897.14 0.00 0.00 72.0 1896.58 0.00 0.00 87.0 1896.02 0.00 0.00 0.00 102.0  
 1895.46 0.00 0.00 117.0 1894.90 0.00 0.00 132.0 1894.60 0.00 0.00 0.00 145.0  
 1894.40 0.00 0.00 152.0 1894.20 0.00 0.00 156.0 1894.20 0.00 0.00 0.00 158.0  
 1894.20 0.00 0.00 160.0 1894.10 0.00 0.00 162.0 1894.10 0.00 0.00 0.00 169.0

1894.20 0.00 0.00 171.0 1894.30 0.00 0.00 174.0 1894.30 0.00 0.00 179.0  
 1894.40 0.00 0.00 181.0 1894.50 0.00 0.00 184.0 1894.60 0.00 0.00 187.0  
 1894.60 0.00 0.00 189.0 1894.80 0.00 0.00 191.0 1894.80 0.00 0.00 199.0  
 1894.80 0.00 0.00 203.0 1894.80 0.00 0.00 207.0 1894.70 0.00 0.00 211.0  
 1894.60 0.00 0.00 214.0 1894.50 0.00 0.00 217.0 1894.40 0.00 0.00 222.0  
 1894.30 0.00 0.00 226.0 1894.30 0.00 0.00 231.0 1894.10 0.00 0.00 238.0  
 1894.00 0.00 0.00 248.0 1893.90 0.00 0.00 258.0 1893.93 0.00 0.00 269.3  
 1893.97 0.00 0.00 280.7 1894.00 0.00 0.00 292.0 1893.70 0.00 0.00 296.0  
 1893.10 0.00 0.00 308.0 1893.00 0.00 0.00 310.0 1892.80 0.00 0.00 314.0  
 1892.45 0.00 -0.05 315.6 1891.27 -0.01 -1.13 318.8 1892.83 0.00 -0.07 321.0  
 1893.00 0.00 0.00 325.0 1893.10 0.00 0.00 328.0 1893.10 0.00 0.00 331.0  
 1893.20 0.00 0.00 337.0 1893.20 0.00 0.00 339.0 1893.10 0.00 0.00 342.0  
 1893.10 0.00 0.00 346.0 1893.00 0.00 0.00 350.0 1892.80 0.00 0.00 357.0  
 1892.80 0.00 0.00 361.0 1892.80 0.00 0.00 363.0 1891.77 -0.01 -0.93 366.4  
 1892.23 0.00 -0.27 379.7 1892.22 -0.01 -0.08 389.7 1892.21 -0.01 0.11 400.0  
 1892.22 -0.01 0.15 413.2 1892.20 -0.01 0.15 426.5 1892.18 -0.01 0.16 439.8  
 1892.16 -0.01 0.16 453.0 1892.18 -0.01 0.08 456.0 1892.17 -0.01 -0.03 459.0  
 1892.18 -0.01 -0.12 466.0 1892.16 -0.01 -0.04 470.0 1892.17 -0.01 0.07 474.0  
 1892.13 -0.01 -0.07 477.1 1892.17 -0.01 -0.23 479.2 1892.16 -0.01 -0.34 481.0  
 1892.17 -0.01 -0.33 484.0 1892.14 -0.01 -0.36 490.1 1892.16 -0.01 -0.44 493.0  
 1892.12 -0.01 -0.47 499.0 1892.16 -0.01 -0.34 502.9 1892.16 -0.01 -0.34 508.0  
 1892.15 -0.01 -0.25 517.8 1892.13 -0.01 -0.27 520.0 1892.14 -0.01 -0.16 523.9  
 1892.15 -0.01 -0.16 527.0 1892.11 -0.01 -0.08 530.0 1891.78 -0.01 -0.22 536.0  
 1891.72 -0.02 -0.28 543.0 1891.61 -0.02 -0.39 554.7 1891.50 -0.02 -0.50 566.3  
 1891.37 -0.02 -0.63 578.0 1890.83 -0.03 -1.07 582.0 1890.30 -0.04 -1.50 585.0  
 1889.80 -0.03 -1.90 587.0 1889.80 -0.03 -1.90 599.0 1890.33 -0.04 -1.47 603.0  
 1890.36 -0.04 -1.44 605.0 1890.89 -0.03 -1.01 608.0 1890.98 -0.03 -0.92 615.0  
 1891.49 -0.02 -0.51 619.0 1891.52 -0.02 -0.48 622.0 1891.95 -0.01 -0.15 628.0  
 1892.01 -0.01 -0.19 636.0 1892.05 -0.01 -0.25 641.1 1891.50 -0.02 -0.90 646.4  
 1892.73 0.00 0.23 649.0 1892.73 0.00 0.23 652.0 1892.03 -0.01 -0.47 653.9  
 1892.73 0.00 0.13 656.0 1891.88 -0.01 -0.72 659.9 1892.73 0.00 0.03 664.0  
 1892.73 0.00 0.03 667.0 1891.90 -0.01 -0.70 670.5 1891.92 -0.01 -0.68 675.5  
 1892.73 0.00 0.03 678.0 1892.73 0.00 0.03 686.0 1892.73 0.00 0.03 689.0  
 1891.96 -0.01 -0.64 690.5 1892.41 0.00 -0.18 694.2 1891.75 -0.01 -0.95 696.6  
 1892.80 0.00 0.00 700.0 1891.77 -0.01 -0.93 706.4 1892.73 0.00 0.03 713.0  
 1891.79 -0.01 -0.91 717.1 1892.80 0.00 0.00 721.0 1892.80 0.00 0.00 732.0  
 1892.80 0.00 0.00 736.0 1891.83 -0.01 -0.87 737.4 1892.73 0.00 0.03 742.0  
 1892.73 0.00 0.03 746.0 1892.47 0.00 -0.13 749.3 1892.73 0.00 0.13 755.0  
 1892.74 0.00 0.14 761.0 1892.76 0.00 0.26 764.0 1892.98 0.00 0.00 767.0

ID  
 29 SECTION 2800.00 TIME = 17.03 HRS WS = 1892.00 WIDTH = 441.5

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1901.20 0.00 0.00 0.0 1901.20 0.00 0.00 5.0 1901.30 0.00 0.00 9.0  
 1901.30 0.00 0.00 11.0 1901.30 0.00 0.00 15.0 1901.20 0.00 0.00 17.0  
 1900.90 0.00 0.00 22.0 1900.70 0.00 0.00 27.0 1900.20 0.00 0.00 35.0  
 1899.50 0.00 0.00 42.0 1898.00 0.00 0.00 55.0 1897.00 0.00 0.00 66.0  
 1896.00 0.00 0.00 77.0 1895.65 0.00 0.00 87.0 1895.30 0.00 0.00 97.0  
 1894.80 0.00 0.00 108.0 1894.20 0.00 0.00 125.0 1893.90 0.00 0.00 133.0  
 1893.80 0.00 0.00 135.0 1893.70 0.00 0.00 143.0 1893.60 0.00 0.00 146.0  
 1893.60 0.00 0.00 149.0 1893.40 0.00 0.00 154.0 1893.40 0.00 0.00 156.0  
 1893.30 0.00 0.00 160.0 1893.20 0.00 0.00 163.0 1893.20 0.00 0.00 167.0  
 1893.10 0.00 0.00 170.0 1893.00 0.00 0.00 172.0 1892.90 0.00 0.00 174.0  
 1893.00 0.00 0.00 180.0 1893.00 0.00 0.00 183.0 1893.10 0.00 0.00 185.0  
 1893.10 0.00 0.00 188.0 1893.20 0.00 0.00 190.0 1893.30 0.00 0.00 193.0  
 1893.40 0.00 0.00 196.0 1893.60 0.00 0.00 202.0 1893.60 0.00 0.00 209.0  
 1893.60 0.00 0.00 211.0 1893.60 0.00 0.00 213.0 1893.70 0.00 0.00 217.0  
 1893.70 0.00 0.00 219.0 1893.70 0.00 0.00 223.0 1893.60 0.00 0.00 225.0  
 1893.60 0.00 0.00 227.0 1893.50 0.00 0.00 230.0 1893.50 0.00 0.00 233.0  
 1893.40 0.00 0.00 235.0 1893.30 0.00 0.00 238.0 1893.20 0.00 0.00 242.0

1892.90 0.00 0.00 248.0 1892.80 0.00 0.00 253.0 1892.80 0.00 0.00 257.0  
 1892.60 0.00 0.00 262.0 1892.50 0.00 0.00 267.0 1892.40 0.00 0.00 270.0  
 1892.40 0.00 0.00 274.0 1892.30 0.00 0.00 276.0 1892.20 0.00 0.00 278.0  
 1892.20 0.00 0.00 280.0 1892.20 0.00 0.00 283.0 1892.30 0.00 0.00 291.0  
 1892.30 0.00 0.00 297.0 1892.40 0.00 0.00 302.0 1892.30 0.00 0.00 305.0  
 1892.20 0.00 0.00 308.0 1891.84 0.01 -0.16 310.9 1891.82 0.00 0.02 322.9  
 1891.83 0.00 0.13 330.0 1891.83 0.00 0.23 337.0 1891.83 0.00 0.33 348.1  
 1891.83 0.00 0.43 354.0 1891.82 0.00 0.52 358.0 1891.82 0.00 0.51 362.0  
 1891.81 0.00 0.51 372.0 1891.80 0.00 0.50 382.0 1891.74 0.00 0.44 386.1  
 1891.82 0.00 0.32 395.0 1891.82 0.00 0.32 400.0 1891.82 0.00 0.32 404.0  
 1891.83 0.00 0.43 406.0 1891.82 0.00 0.42 409.0 1891.75 0.00 0.45 411.9  
 1891.78 0.00 0.48 415.0 1891.77 0.00 0.57 418.0 1891.74 0.00 0.54 420.0  
 1891.67 0.00 0.52 436.5 1891.56 0.00 0.46 453.0 1891.67 0.00 0.47 462.0  
 1891.73 0.00 0.43 464.0 1891.73 0.00 0.43 467.0 1891.67 0.00 0.37 470.1  
 1891.80 0.00 0.40 475.0 1891.80 0.00 0.40 478.0 1891.80 0.00 0.40 484.0  
 1891.80 0.00 0.40 487.0 1891.78 0.00 0.38 492.0 1891.81 0.00 0.31 499.0  
 1891.80 0.00 0.30 503.0 1891.77 0.00 0.37 505.0 1891.78 0.00 0.39 507.0  
 1891.78 0.00 0.38 510.0 1891.59 0.00 0.30 511.9 1891.67 0.00 0.37 515.0  
 1891.55 0.00 0.35 517.0 1891.55 0.00 0.35 520.0 1891.54 0.00 0.34 522.0  
 1891.28 -0.01 0.18 524.0 1891.10 -0.01 0.10 527.0 1890.80 -0.01 -0.10 532.0  
 1890.76 -0.01 -0.14 537.0 1890.43 -0.01 -0.37 540.0 1890.36 -0.01 -0.44 546.0  
 1890.05 -0.02 -0.64 549.0 1890.23 -0.02 -0.57 558.0 1890.18 -0.02 -0.62 562.0  
 1890.48 -0.01 -0.42 565.0 1890.79 -0.01 -0.21 569.0 1890.02 -0.02 -0.78 575.0  
 1889.80 -0.02 -0.90 581.0 1889.63 -0.02 -0.97 583.0 1889.61 -0.02 -0.99 585.0  
 1889.45 -0.02 -1.05 590.0 1889.45 -0.02 -1.05 593.0 1889.59 -0.02 -1.01 595.0  
 1889.60 -0.02 -1.00 597.0 1889.62 -0.02 -0.98 599.0 1889.80 -0.02 -0.90 601.0  
 1889.98 -0.02 -0.82 603.0 1889.99 -0.02 -0.81 605.0 1890.36 -0.01 -0.54 607.0  
 1890.38 -0.01 -0.52 609.0 1890.40 -0.01 -0.50 611.0 1890.80 -0.01 -0.20 615.0  
 1891.14 -0.01 0.04 629.0 1891.22 -0.01 0.02 634.1 1891.76 0.00 0.36 642.0  
 1891.54 0.00 0.24 646.9 1891.77 0.00 0.37 652.0 1891.77 0.00 0.37 654.0  
 1891.77 0.00 0.37 660.0 1891.77 0.00 0.37 664.0 1891.59 0.00 0.29 666.9  
 1891.67 0.00 0.37 671.0 1891.78 0.00 0.38 673.0 1891.77 0.00 0.37 676.0  
 1891.82 0.00 0.32 680.0 1891.77 0.00 0.27 682.1 1891.87 0.00 0.27 684.0  
 1891.87 0.00 0.27 688.0 1891.87 0.00 0.27 691.0 1891.87 0.00 0.27 697.0  
 1891.87 0.00 0.27 699.0 1891.87 0.00 0.27 703.0 1891.87 0.00 0.27 707.0  
 1891.79 0.00 0.29 708.9 1891.83 0.00 0.33 711.0 1891.79 0.00 0.39 716.0  
 1891.81 0.00 0.41 720.0 1891.83 0.00 0.43 723.0 1891.89 0.00 0.48 724.9  
 1891.89 0.00 0.49 729.9 1891.89 0.00 0.49 736.9 1891.90 0.00 0.40 740.9  
 1891.90 0.00 0.20 745.0 1891.92 0.00 0.32 746.9 1891.99 0.01 0.39 750.9  
 1892.24 0.00 0.00 753.0

**ID**  
 28 SECTION 2700.00 TIME = 17.03 HRS WS = 1891.00 WIDTH = 410.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1897.60	0.00	0.00	0.0	1897.70	0.00	0.00	4.0	1897.80	0.00	0.00	14.0
1897.80	0.00	0.00	23.0	1897.90	0.00	0.00	30.0	1897.80	0.00	0.00	35.0
1898.00	0.00	0.00	51.0	1896.80	0.00	0.00	64.0	1895.95	0.00	0.00	73.5
1895.10	0.00	0.00	83.0	1894.30	0.00	0.00	97.0	1893.80	0.00	0.00	109.0
1893.70	0.00	0.00	113.0	1893.20	0.00	0.00	128.0	1893.10	0.00	0.00	132.0
1893.00	0.00	0.00	139.0	1892.50	0.00	0.00	155.0	1892.25	0.00	0.00	171.0
1892.00	0.00	0.00	187.0	1891.90	0.00	0.00	201.5	1891.80	0.00	0.00	216.0
1891.80	0.00	0.00	226.0	1891.90	0.00	0.00	233.0	1891.90	0.00	0.00	239.0
1891.90	0.00	0.00	248.0	1892.00	0.00	0.00	254.0	1892.00	0.00	0.00	255.0
1892.10	0.00	0.00	261.0	1892.20	0.00	0.00	269.0	1892.10	0.00	0.00	274.0
1892.10	0.00	0.00	281.0	1891.80	0.00	0.00	292.0	1891.80	0.00	0.00	294.0
1891.60	0.00	0.00	299.0	1891.40	0.00	0.00	302.0	1891.30	0.00	0.00	305.0
1890.85	-0.01	-0.25	308.8	1890.83	0.01	-0.17	313.8	1890.83	0.01	-0.07	317.9
1890.81	0.01	-0.09	323.0	1890.83	0.01	0.03	331.0	1890.81	0.01	0.11	334.8
1890.83	0.01	0.23	336.9	1890.83	0.01	0.33	338.9	1890.81	0.01	0.41	342.0
1890.83	0.01	0.33	344.0	1890.82	0.01	0.33	346.0	1890.82	0.01	0.32	348.0

1890.80	0.01	0.32	361.5	1890.79	0.01	0.34	375.0	1890.79	0.01	0.36	388.5
1890.82	0.01	0.42	402.0	1890.81	0.01	0.51	412.0	1890.79	0.01	0.60	419.0
1890.78	0.01	0.68	428.0	1890.78	0.01	0.68	431.0	1890.66	0.01	0.66	440.0
1890.49	0.02	0.59	446.0	1890.48	0.02	0.57	450.0	1890.63	0.01	0.63	452.0
1890.61	0.01	0.61	459.0	1890.72	0.01	0.62	464.0	1890.71	0.01	0.61	470.0
1890.71	0.01	0.61	475.0	1890.70	0.01	0.60	478.0	1890.68	0.01	0.48	491.0
1890.65	0.01	0.45	502.0	1890.64	0.01	0.44	507.0	1890.63	0.01	0.43	512.0
1890.61	0.01	0.51	519.0	1890.40	0.02	0.40	526.0	1890.12	0.02	0.22	530.0
1890.11	0.02	0.21	533.0	1889.80	0.02	0.00	535.0	1889.92	0.02	0.05	549.0
1890.05	0.02	0.11	563.0	1890.19	0.02	0.19	577.0	1889.44	0.02	-0.37	581.0
1889.33	0.02	-0.47	592.0	1889.28	0.02	-0.52	598.0	1888.83	0.03	-0.87	604.0
1888.73	0.03	-0.97	611.0	1888.73	0.03	-0.97	615.0	1889.16	0.03	-0.64	617.0
1889.72	0.02	-0.18	631.5	1890.18	0.02	0.18	646.0	1890.31	0.02	0.21	653.0
1890.33	0.02	0.23	661.0	1890.36	0.02	0.26	666.0	1890.45	0.02	0.25	670.0
1890.38	0.02	0.28	673.0	1890.40	0.02	0.30	680.0	1890.43	0.02	0.33	688.0
1890.45	0.02	0.35	694.0	1890.46	0.02	0.36	697.0	1890.48	0.02	0.38	703.0
1890.52	-0.01	0.42	713.0	1891.08	0.00	1.08	718.8	1891.33	0.00	0.00	730.0

ID  
 27 SECTION 2600.00 TIME = 17.03 HRS WS=1890.10 WIDTH = 504.4

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1893.70	0.00	0.00	0.0	1894.00	0.00	0.00	7.0	1894.40	0.00	0.00	19.0
1894.60	0.00	0.00	23.0	1894.80	0.00	0.00	28.0	1894.90	0.00	0.00	35.0
1895.00	0.00	0.00	42.0	1895.20	0.00	0.00	45.0	1895.10	0.00	0.00	50.0
1895.10	0.00	0.00	59.0	1895.20	0.00	0.00	61.0	1895.30	0.00	0.00	66.0
1895.30	0.00	0.00	68.0	1895.30	0.00	0.00	72.0	1895.30	0.00	0.00	75.0
1895.20	0.00	0.00	79.0	1895.10	0.00	0.00	81.0	1894.90	0.00	0.00	86.0
1894.50	0.00	0.00	95.0	1894.00	0.00	0.00	105.0	1893.00	0.00	0.00	120.0
1892.00	0.00	0.00	135.0	1891.70	0.00	0.00	149.0	1891.50	0.00	0.00	152.0
1891.40	0.00	0.00	158.0	1891.30	0.00	0.00	165.0	1891.20	0.00	0.00	170.0
1891.20	0.00	0.00	174.0	1891.20	0.00	0.00	178.0	1891.10	0.00	0.00	184.0
1891.10	0.00	0.00	187.0	1891.10	0.00	0.00	191.0	1891.00	0.00	0.00	195.0
1890.90	0.00	0.00	201.0	1890.80	0.00	0.00	206.0	1890.70	0.00	0.00	216.0
1890.50	0.00	0.00	225.0	1890.50	0.00	0.00	228.0	1890.40	0.00	0.00	231.0
1890.40	0.00	0.00	233.0	1890.30	0.00	0.00	235.0	1890.30	0.00	0.00	237.0
1890.20	0.00	0.00	239.0	1890.20	0.00	0.00	247.0	1890.20	0.00	0.00	250.0
1890.20	0.00	0.00	255.0	1890.20	0.00	0.00	259.0	1890.20	0.00	0.00	263.0
1890.10	0.00	0.00	269.0	1890.08	0.00	-0.02	271.0	1890.08	0.00	-0.02	278.0
1889.97	0.00	-0.03	279.9	1890.08	0.00	-0.02	283.0	1890.20	0.00	0.00	286.0
1890.30	0.00	0.00	289.0	1890.20	0.00	0.00	293.0	1890.08	0.00	-0.02	296.0
1889.76	-0.01	-0.24	300.7	1889.89	0.00	-0.01	308.9	1889.86	0.00	0.06	312.8
1889.84	-0.01	0.04	319.0	1889.83	-0.01	0.13	321.9	1889.83	-0.01	0.13	324.0
1889.83	-0.01	0.23	327.9	1889.83	-0.01	0.23	334.0	1889.82	-0.01	0.22	338.0
1889.82	-0.01	0.32	339.9	1889.81	-0.01	0.41	341.9	1889.81	-0.01	0.41	344.0
1889.80	-0.01	0.40	347.0	1889.75	-0.01	0.45	348.9	1889.74	-0.01	0.44	353.0
1889.74	-0.01	0.44	359.0	1889.73	-0.01	0.43	366.1	1889.78	-0.01	0.38	368.0
1889.78	-0.01	0.38	371.1	1889.80	-0.01	0.30	373.0	1889.81	-0.01	0.31	377.1
1889.81	-0.01	0.21	383.0	1889.81	-0.01	0.21	389.0	1889.81	-0.01	0.21	391.0
1889.80	-0.01	0.20	397.0	1889.80	-0.01	0.20	400.1	1889.80	-0.01	0.10	406.0
1889.80	-0.01	0.10	408.0	1889.79	-0.01	0.10	413.0	1889.79	-0.01	0.09	415.0
1889.79	-0.01	0.09	419.0	1889.79	-0.01	0.09	421.0	1889.79	-0.01	0.18	423.9
1889.78	-0.01	0.18	426.0	1889.78	-0.01	0.18	428.0	1889.76	-0.01	0.26	429.9
1889.77	-0.01	0.27	432.0	1889.38	-0.02	0.08	433.8	1889.64	-0.01	0.34	438.0
1889.64	-0.01	0.34	440.0	1889.63	-0.01	0.33	444.0	1889.63	-0.01	0.42	449.9
1889.63	-0.01	0.43	453.0	1889.52	-0.02	0.42	455.9	1889.50	-0.02	0.40	459.0
1889.49	-0.02	0.39	461.0	1889.49	-0.02	0.39	465.0	1889.48	-0.02	0.38	468.0
1889.27	-0.03	0.47	483.0	1889.03	-0.04	0.42	489.0	1889.01	-0.04	0.41	493.0
1888.83	-0.04	0.33	496.0	1888.64	-0.05	0.24	499.0	1888.63	-0.05	0.23	501.0
1888.44	-0.06	0.14	503.0	1888.43	-0.06	0.12	505.0	1888.41	-0.06	0.11	507.0
1888.21	-0.07	0.01	509.0	1888.19	-0.07	-0.01	512.0	1888.35	-0.06	0.05	517.0

1888.34	-0.06	0.04	519.0	1888.12	-0.07	-0.08	525.0	1888.12	-0.07	-0.08	527.0				
1888.32	-0.07	0.02	531.0	1888.91	-0.04	0.31	535.0	1889.09	-0.04	0.39	537.0				
1889.18	-0.03	0.38	541.0	1889.29	-0.03	0.39	543.0	1889.32	-0.03	0.32	546.0				
1889.31	-0.03	0.31	547.0	1889.32	-0.03	0.22	552.0	1889.34	-0.03	0.24	558.0				
1889.34	-0.03	0.34	560.0	1889.35	-0.03	0.45	564.0	1889.36	-0.03	0.45	567.0				
1889.27	-0.03	0.47	570.0	1889.29	-0.03	0.49	575.0	1889.39	-0.02	0.48	579.0				
1889.27	-0.03	0.57	593.0	1888.89	-0.04	0.49	602.0	1888.90	-0.04	0.50	604.0				
1888.76	-0.04	0.46	606.0	1888.78	-0.04	0.48	610.0	1888.94	-0.04	0.54	613.0				
1889.22	-0.03	0.62	619.0	1889.24	-0.03	0.63	622.0	1889.24	-0.03	0.64	624.0				
1889.45	-0.02	0.65	638.0	1889.46	-0.02	0.66	641.0	1889.53	-0.02	0.43	656.1				
1889.55	-0.01	0.35	660.2	1889.61	-0.01	0.21	663.2	1889.73	-0.01	0.13	674.7				
1890.03	0.00	0.23	686.0	1890.03	0.00	0.23	690.0	1890.03	0.00	0.23	704.2				
1890.03	0.00	0.23	718.3	1890.03	0.00	0.23	732.5	1890.03	0.00	0.23	746.7				
1890.03	0.00	0.23	760.8	1890.04	0.00	0.24	775.0	1890.08	0.00	0.28	782.0				
1890.10	0.00	0.40	784.9	1890.36	0.00	0.00	787.0								

ID  
26 SECTION 2500.00 TIME = 17.03 HRS WS = 1888.94 WIDTH = 411.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y				
1891.70	0.00	0.00	0.0	1892.00	0.00	0.00	9.0	1892.20	0.00	0.00	14.0				
1892.30	0.00	0.00	21.0	1892.40	0.00	0.00	25.0	1892.40	0.00	0.00	31.0				
1892.50	0.00	0.00	35.0	1892.60	0.00	0.00	39.0	1892.60	0.00	0.00	42.0				
1892.60	0.00	0.00	46.0	1892.60	0.00	0.00	51.0	1892.50	0.00	0.00	55.0				
1892.30	0.00	0.00	57.0	1892.30	0.00	0.00	59.0	1892.30	0.00	0.00	61.0				
1892.30	0.00	0.00	64.0	1892.30	0.00	0.00	68.0	1892.40	0.00	0.00	71.0				
1892.60	0.00	0.00	74.0	1892.70	0.00	0.00	78.0	1892.70	0.00	0.00	84.0				
1892.70	0.00	0.00	88.0	1892.60	0.00	0.00	92.0	1892.30	0.00	0.00	100.0				
1892.00	0.00	0.00	109.0	1891.70	0.00	0.00	115.0	1891.50	0.00	0.00	120.0				
1891.00	0.00	0.00	133.0	1890.70	0.00	0.00	140.0	1890.60	0.00	0.00	142.0				
1890.40	0.00	0.00	150.0	1890.30	0.00	0.00	154.0	1890.10	0.00	0.00	159.0				
1890.10	0.00	0.00	161.0	1890.10	0.00	0.00	177.0	1890.10	0.00	0.00	193.0				
1890.00	0.00	0.00	200.0	1889.80	0.00	0.00	210.0	1889.70	0.00	0.00	216.0				
1889.60	0.00	0.00	221.0	1889.35	0.00	0.00	233.0	1889.10	0.00	0.00	245.0				
1889.10	0.00	0.00	249.0	1889.10	0.00	0.00	257.0	1889.10	0.00	0.00	262.0				
1888.77	0.03	-0.23	264.8	1888.73	0.02	-0.27	272.0	1888.51	0.02	-0.38	274.6				
1888.50	0.02	-0.40	279.0	1888.50	0.02	-0.30	281.8	1888.50	0.02	-0.30	284.0				
1888.50	0.02	-0.30	288.0	1888.50	0.02	-0.20	290.9	1888.50	0.02	-0.20	295.0				
1888.49	0.02	-0.21	298.0	1888.49	0.02	-0.21	303.0	1888.49	0.02	-0.21	305.2				
1888.48	0.02	-0.32	310.0	1888.47	0.02	-0.23	326.8	1888.47	0.02	-0.13	331.9				
1888.46	0.02	-0.14	341.0	1888.45	0.02	-0.05	346.0	1888.46	0.02	-0.04	348.0				
1888.45	0.02	-0.05	355.0	1888.45	0.02	0.05	358.1	1888.45	0.02	0.05	360.0				
1888.45	0.02	0.05	364.0	1888.44	0.02	0.14	366.0	1888.44	0.02	0.14	369.0				
1888.43	0.02	0.14	372.0	1888.43	0.02	0.03	375.0	1888.44	0.02	0.04	379.0				
1888.43	0.02	-0.07	387.0	1888.43	0.02	-0.17	389.0	1888.42	0.02	-0.18	399.1				
1888.42	0.02	-0.28	401.0	1888.42	0.02	-0.28	403.0	1888.41	0.02	-0.29	406.0				
1888.41	0.02	-0.29	412.0	1888.41	0.02	-0.29	415.0	1888.42	0.02	-0.28	418.0				
1888.42	0.02	-0.28	422.0	1888.42	0.02	-0.18	423.9	1888.42	0.02	-0.08	427.0				
1888.41	0.02	-0.09	430.0	1888.40	0.02	0.00	436.0	1888.39	0.02	-0.11	439.0				
1888.38	0.02	-0.12	450.0	1888.39	0.02	-0.11	455.0	1888.38	0.02	-0.12	459.0				
1887.80	0.03	-0.40	464.0	1887.75	0.03	-0.45	473.0	1886.84	0.03	-1.15	482.0				
1887.17	0.03	-0.87	497.7	1887.49	0.03	-0.59	513.3	1887.78	0.03	-0.35	529.0				
1888.03	0.03	-0.13	544.7	1888.26	0.02	0.05	560.3	1888.45	0.02	0.20	576.0				
1888.61	0.02	0.32	591.7	1888.74	0.02	0.40	607.3	1888.82	0.01	0.45	623.0				
1888.84	0.01	0.42	638.6	1888.85	0.01	0.39	654.3	1888.86	0.01	0.36	670.0				
1888.88	0.01	0.37	672.1	1888.94	0.00	0.24	674.1	1889.01	0.00	0.21	677.0				
1889.01	0.00	0.21	679.0	1889.01	0.00	0.21	682.0	1889.01	0.00	0.21	684.0				
1889.02	0.00	0.12	688.0	1889.24	0.00	0.00	693.0								

ID  
25 SECTION 2400.00 TIME = 17.03 HRS WS = 1888.04 WIDTH = 380.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1890.10	0.00	0.00	0.0	1890.20	0.00	0.00	4.0	1890.30	0.00	0.00	11.0
1890.40	0.00	0.00	18.0	1890.40	0.00	0.00	21.0	1890.40	0.00	0.00	27.0
1890.30	0.00	0.00	37.0	1890.20	0.00	0.00	46.0	1890.20	0.00	0.00	48.0
1890.20	0.00	0.00	52.0	1890.00	0.00	0.00	61.0	1889.90	0.00	0.00	69.0
1889.90	0.00	0.00	76.0	1889.80	0.00	0.00	82.0	1889.70	0.00	0.00	87.0
1889.50	0.00	0.00	94.0	1889.30	0.00	0.00	102.0	1889.10	0.00	0.00	114.0
1889.10	0.00	0.00	121.0	1889.00	0.00	0.00	126.0	1888.90	0.00	0.00	131.0
1888.90	0.00	0.00	134.0	1888.90	0.00	0.00	139.0	1888.80	0.00	0.00	143.0
1888.70	0.00	0.00	148.0	1888.70	0.00	0.00	151.0	1888.70	0.00	0.00	153.0
1888.60	0.00	0.00	158.0	1888.50	0.00	0.00	160.0	1888.50	0.00	0.00	162.0
1888.40	0.00	0.00	165.0	1888.50	0.00	0.00	167.0	1888.60	0.00	0.00	169.0
1888.60	0.00	0.00	172.0	1888.70	0.00	0.00	177.0	1888.70	0.00	0.00	179.0
1888.80	0.00	0.00	182.0	1888.90	0.00	0.00	187.0	1888.90	0.00	0.00	191.0
1888.90	0.00	0.00	203.0	1888.90	0.00	0.00	206.0	1889.00	0.00	0.00	208.0
1888.90	0.00	0.00	218.0	1888.80	0.00	0.00	228.0	1888.80	0.00	0.00	231.0
1888.80	0.00	0.00	236.0	1888.70	0.00	0.00	240.0	1888.70	0.00	0.00	247.0
1888.60	0.00	0.00	251.0	1888.30	0.00	0.00	265.0	1888.10	0.00	0.00	278.0
1887.57	-0.01	-0.23	281.7	1887.54	0.00	0.04	297.0	1887.54	0.00	0.04	304.0
1887.52	0.00	0.02	311.0	1887.54	0.00	0.14	314.0	1887.53	0.00	0.13	320.0
1887.52	0.00	0.12	324.0	1887.54	0.00	0.14	329.0	1887.54	0.00	0.04	341.0
1887.50	0.00	-0.10	353.0	1887.49	0.00	-0.11	355.0	1887.53	0.00	-0.17	369.0
1887.53	0.00	-0.17	373.0	1887.52	0.00	-0.18	377.0	1887.44	0.00	-0.16	380.0
1887.44	0.00	-0.16	382.0	1887.42	0.00	-0.09	387.0	1887.40	0.00	-0.10	391.0
1887.34	0.00	-0.16	404.0	1887.27	0.00	-0.23	417.0	1887.25	0.00	-0.25	421.0
1887.23	0.00	-0.27	424.0	1887.17	0.00	-0.23	429.0	1887.15	0.00	-0.25	433.0
1887.11	0.00	-0.29	439.0	1886.56	0.00	-0.74	442.0	1885.96	0.00	-1.25	444.0
1885.57	0.00	-1.53	447.0	1885.54	0.00	-1.56	451.0	1885.52	0.00	-1.58	454.0
1885.41	0.00	-1.69	464.0	1885.36	0.00	-1.73	468.0	1885.36	0.00	-1.73	481.0
1886.42	0.00	-0.88	494.7	1887.27	0.00	-0.23	508.4	1887.61	0.00	-0.09	522.1
1887.75	0.00	-0.05	524.0	1887.75	0.00	-0.05	532.0	1887.72	0.00	-0.08	541.0
1887.48	0.00	-0.17	554.1	1887.63	0.00	0.13	567.5	1887.35	0.00	0.00	580.8
1886.98	0.00	-0.22	594.0	1886.99	0.00	-0.21	596.0	1887.20	0.00	-0.05	605.0
1887.38	0.00	0.08	614.0	1887.41	0.00	0.11	620.0	1887.64	0.00	0.24	628.0
1887.47	0.00	0.17	633.0	1887.26	0.00	0.06	636.0	1887.49	0.00	0.19	638.0
1887.50	0.00	0.20	641.0	1887.73	0.00	0.32	642.9	1887.79	0.00	0.28	650.0
1887.96	0.00	0.36	656.9	1888.50	0.00	0.00	670.0				

ID  
24 SECTION 2300.00 TIME = 17.03 HRS WS =1887.06 WIDTH = 386.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1888.10	0.00	0.00	0.0	1888.05	0.00	0.00	9.5	1888.00	0.00	0.00	19.0
1887.90	0.00	0.00	24.0	1887.80	0.00	0.00	28.0	1887.80	0.00	0.00	31.0
1887.80	0.00	0.00	33.0	1887.80	0.00	0.00	40.0	1887.80	0.00	0.00	49.0
1887.80	0.00	0.00	58.0	1887.90	0.00	0.00	62.0	1887.80	0.00	0.00	65.0
1887.80	0.00	0.00	79.0	1887.90	0.00	0.00	85.0	1887.90	0.00	0.00	87.0
1887.90	0.00	0.00	90.0	1887.90	0.00	0.00	95.0	1887.90	0.00	0.00	98.0
1888.00	0.00	0.00	103.0	1888.00	0.00	0.00	107.0	1887.90	0.00	0.00	115.0
1887.80	0.00	0.00	123.0	1887.70	0.00	0.00	128.0	1887.60	0.00	0.00	131.0
1887.60	0.00	0.00	134.0	1887.60	0.00	0.00	139.0	1887.60	0.00	0.00	144.0
1887.50	0.00	0.00	152.0	1887.50	0.00	0.00	155.0	1887.40	0.00	0.00	160.0
1887.30	0.00	0.00	162.0	1887.25	0.00	0.00	175.5	1887.20	0.00	0.00	189.0
1887.30	0.00	0.00	199.0	1887.30	0.00	0.00	203.0	1887.30	0.00	0.00	206.0
1887.30	0.00	0.00	210.0	1887.30	0.00	0.00	215.0	1887.40	0.00	0.00	218.0
1887.50	0.00	0.00	223.0	1887.70	0.00	0.00	235.0	1887.90	0.00	0.00	246.0
1887.90	0.00	0.00	254.0	1888.00	0.00	0.00	263.0	1887.80	0.00	0.00	271.0
1887.20	0.00	0.00	288.0	1886.82	0.00	-0.18	292.7	1886.82	0.00	0.02	296.8
1886.80	0.00	0.10	299.9	1886.79	0.00	0.29	301.9	1886.79	0.00	0.29	304.0

1886.78	0.00	0.48	308.0	1886.78	0.00	0.58	311.0	1886.80	0.00	0.70	315.0
1886.79	0.00	0.59	319.0	1886.77	0.00	0.50	333.5	1886.77	0.00	0.42	348.0
1886.80	0.00	0.38	362.5	1886.78	0.00	0.28	377.0	1886.80	0.00	0.30	381.1
1886.80	0.00	0.20	383.0	1886.79	0.00	0.19	387.0	1886.79	0.00	0.29	390.9
1886.78	0.00	0.28	397.0	1886.77	0.00	0.27	404.0	1886.80	0.00	0.30	411.0
1886.80	0.00	0.40	414.0	1886.78	0.00	0.43	423.0	1886.77	0.00	0.47	432.0
1886.77	0.00	0.47	435.0	1886.77	0.00	0.57	443.0	1886.59	-0.01	0.49	446.0
1886.55	-0.01	0.45	454.0	1886.54	-0.01	0.44	457.0	1886.51	-0.01	0.41	464.0
1886.43	-0.01	0.34	479.2	1886.35	-0.01	0.25	494.4	1886.26	-0.02	0.16	509.6
1886.15	-0.02	0.05	524.8	1886.04	-0.02	-0.06	540.0	1886.01	-0.03	-0.09	543.0
1885.70	-0.03	-0.35	553.0	1885.33	-0.04	-0.67	563.0	1885.78	-0.03	-0.32	569.0
1885.69	-0.04	-0.41	578.0	1885.02	-0.06	-0.98	584.0	1884.91	-0.06	-1.09	591.0
1884.91	-0.06	-1.09	595.0	1885.59	-0.04	-0.51	599.0	1886.25	-0.02	0.05	615.0
1886.27	-0.02	-0.03	618.0	1886.28	-0.02	-0.02	621.0	1886.30	-0.02	-0.10	624.0
1886.32	-0.02	-0.08	627.1	1886.34	-0.02	-0.26	638.2	1886.35	-0.02	-0.45	652.2
1886.39	-0.02	-0.51	662.4	1887.05	0.00	-0.05	675.0	1887.20	0.00	0.00	683.0
1887.30	0.00	0.00	691.0	1887.30	0.00	0.00	696.0	1887.40	0.00	0.00	698.0
1887.40	0.00	0.00	702.0	1887.40	0.00	0.00	706.0	1887.40	0.00	0.00	709.0
1887.50	0.00	0.00	713.0	1887.60	0.00	0.00	716.0	1887.60	0.00	0.00	719.0
1887.60	0.00	0.00	724.0	1887.60	0.00	0.00	729.0	1887.60	0.00	0.00	737.0
1887.70	0.00	0.00	744.0	1887.70	0.00	0.00	752.0	1887.85	0.00	0.00	765.5
1888.00	0.00	0.00	779.0	1887.40	0.00	0.00	796.0	1887.40	0.00	0.00	798.0

ID  
 23 SECTION 2200.00 TIME = 17.03 HRS WS = 1885.72 WIDTH = 335.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1886.33	0.00	0.00	0.0	1885.96	0.00	0.06	4.0	1885.92	0.00	-0.08	8.0
1885.84	0.00	-0.16	11.1	1886.20	0.00	0.00	18.0	1886.30	0.00	0.00	23.0
1886.30	0.00	0.00	26.0	1886.40	0.00	0.00	28.0	1886.40	0.00	0.00	31.0
1886.40	0.00	0.00	38.0	1886.40	0.00	0.00	40.0	1886.40	0.00	0.00	51.0
1886.40	0.00	0.00	56.0	1886.40	0.00	0.00	65.0	1886.40	0.00	0.00	70.0
1886.40	0.00	0.00	73.0	1886.30	0.00	0.00	77.0	1886.20	0.00	0.00	85.0
1886.30	0.00	0.00	87.0	1886.30	0.00	0.00	93.0	1886.30	0.00	0.00	98.0
1886.20	0.00	0.00	110.0	1886.20	0.00	0.00	115.0	1886.30	0.00	0.00	120.0
1886.30	0.00	0.00	125.0	1886.40	0.00	0.00	135.0	1886.30	0.00	0.00	144.0
1886.30	0.00	0.00	152.0	1886.30	0.00	0.00	157.0	1886.20	0.00	0.00	164.0
1885.96	0.00	-0.14	170.0	1885.90	0.00	-0.10	176.9	1885.90	0.00	-0.10	190.5
1885.63	0.02	-0.37	204.0	1886.20	0.00	0.00	214.0	1886.30	0.00	0.00	222.0
1886.30	0.00	0.00	226.0	1886.40	0.00	0.00	229.0	1886.50	0.00	0.00	239.0
1886.50	0.00	0.00	246.0	1886.50	0.00	0.00	252.0	1886.50	0.00	0.00	261.0
1886.40	0.00	0.00	273.0	1886.40	0.00	0.00	277.0	1886.40	0.00	0.00	280.0
1886.30	0.00	0.00	284.0	1886.30	0.00	0.00	287.0	1886.20	0.00	0.00	292.0
1885.96	0.00	-0.14	295.0	1885.89	0.00	-0.11	298.9	1885.55	0.00	-0.35	304.7
1885.61	0.00	-0.09	309.8	1885.58	0.00	0.08	317.9	1885.57	0.00	0.17	333.5
1885.53	0.01	0.23	349.0	1885.52	0.01	0.22	352.0	1885.49	0.01	0.19	357.0
1885.52	0.01	0.21	370.0	1885.50	0.01	0.20	373.0	1885.32	0.01	0.12	376.0
1884.97	0.01	-0.13	387.0	1884.86	0.01	-0.24	400.0	1884.78	0.01	-0.32	409.0
1885.05	0.01	-0.15	412.0	1885.30	0.01	-0.10	426.0	1885.28	0.01	-0.12	428.0
1885.22	0.01	-0.18	441.0	1885.21	0.01	-0.19	443.0	1885.17	0.01	-0.13	446.0
1885.18	0.01	-0.12	448.0	1884.76	0.01	-0.44	452.0	1884.23	0.01	-0.87	456.0
1884.60	0.01	-0.60	468.0	1884.56	0.01	-0.64	472.0	1884.50	0.01	-0.70	477.0
1884.46	0.01	-0.74	481.0	1883.81	0.01	-1.29	484.0	1883.76	0.01	-1.34	487.0
1883.06	0.02	-1.94	490.0	1883.06	0.02	-1.94	494.0	1883.76	0.01	-1.34	497.0
1883.79	0.01	-1.31	499.0	1883.97	0.01	-1.13	510.0	1884.58	0.01	-0.62	514.0
1884.67	0.01	-0.53	523.0	1884.70	0.01	-0.50	525.0	1885.12	0.01	-0.18	527.0
1885.14	0.01	-0.16	530.0	1884.77	0.01	-0.43	533.0	1884.80	0.01	-0.40	536.0
1884.84	0.01	-0.36	540.0	1884.85	0.01	-0.35	542.0	1884.53	0.01	-0.57	552.0
1885.07	0.01	-0.13	568.5	1885.44	0.01	0.14	585.0	1885.43	0.01	0.13	591.0
1885.41	0.01	0.01	599.0	1885.46	0.01	-0.04	603.0	1885.44	0.01	-0.06	612.0
1885.45	0.01	-0.15	617.1	1885.46	0.01	-0.24	623.0	1885.49	0.03	-0.21	626.3

1885.83 0.00 -0.07 632.1 1885.89 0.00 -0.11 640.1 1886.10 0.00 0.00 0.00 643.0  
 1886.10 0.00 0.00 647.0 1886.20 0.00 0.00 658.0 1886.20 0.00 0.00 0.00 664.0  
 1886.20 0.00 0.00 670.0 1886.20 0.00 0.00 675.0 1886.20 0.00 0.00 0.00 680.0  
 1886.10 0.00 0.00 687.0 1886.30 0.00 0.00 699.3 1886.50 0.00 0.00 0.00 711.7  
 1886.70 0.00 0.00 724.0 1886.90 0.00 0.00 735.5 1887.10 0.00 0.00 0.00 747.0  
 1887.30 0.00 0.00 760.0 1887.60 0.00 0.00 777.0 1887.65 0.00 0.00 0.00 786.5  
 1887.70 0.00 0.00 796.0 1888.20 0.00 0.00 800.0

ID  
 22 SECTION 2100.00 TIME = 17.03 HRS WS = 1885.02 WIDTH = 348.3

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1885.50 0.00 0.00 224.0 1885.30 0.00 0.00 240.0 1885.30 0.00 0.00 0.00 242.0  
 1885.40 0.00 0.00 247.0 1885.40 0.00 0.00 251.0 1885.40 0.00 0.00 0.00 255.0  
 1885.30 0.00 0.00 259.0 1885.30 0.00 0.00 264.0 1885.30 0.00 0.00 0.00 267.0  
 1885.20 0.00 0.00 269.0 1885.20 0.00 0.00 271.0 1885.20 0.00 0.00 0.00 273.0  
 1885.10 0.00 0.00 276.0 1885.10 0.00 0.00 278.0 1885.05 0.00 0.05 0.05 279.9  
 1884.93 0.01 0.03 281.9 1884.91 0.00 0.01 285.0 1884.90 0.00 0.10 0.10 289.9  
 1884.90 0.00 0.10 293.0 1884.90 0.00 0.20 297.0 1884.90 0.00 0.30 0.30 302.0  
 1884.90 0.00 0.30 310.0 1884.89 0.00 0.29 315.0 1884.89 0.00 0.29 0.29 319.0  
 1884.89 0.00 0.32 330.3 1884.88 0.00 0.35 341.6 1884.87 0.00 0.37 0.37 353.0  
 1884.82 0.00 0.41 358.0 1884.75 0.00 0.45 364.0 1884.61 -0.01 0.41 0.41 371.0  
 1884.46 -0.01 0.31 383.0 1884.27 -0.01 0.17 395.0 1884.18 -0.01 0.08 0.08 407.0  
 1884.42 -0.01 0.22 413.0 1884.41 -0.01 0.21 416.0 1884.36 -0.01 0.16 0.16 425.0  
 1884.30 -0.01 0.10 434.0 1884.21 -0.02 0.01 447.0 1884.14 -0.02 -0.06 457.0  
 1884.10 -0.02 -0.10 462.0 1883.01 -0.04 -0.99 470.0 1882.94 -0.05 -1.06 474.0  
 1882.25 -0.06 -1.66 478.0 1882.97 -0.04 -1.03 484.0 1883.42 -0.03 -0.63 495.5  
 1883.80 -0.02 -0.30 507.0 1884.19 -0.02 -0.01 513.0 1883.94 -0.02 -0.16 521.0  
 1883.99 -0.02 -0.11 526.0 1884.04 -0.02 -0.06 532.0 1883.80 -0.02 -0.20 542.0  
 1883.82 -0.02 -0.18 544.0 1884.18 -0.01 0.08 549.0 1884.42 -0.01 0.22 0.22 553.0  
 1884.47 -0.01 0.17 562.0 1884.52 -0.01 0.22 575.0 1884.59 -0.01 0.29 0.29 588.1  
 1884.71 0.00 0.21 601.0 1884.74 0.00 0.14 611.1 1884.77 0.00 -0.03 616.2  
 1884.82 0.00 -0.18 625.2 1885.10 0.00 0.00 630.0 1885.10 0.00 0.00 0.00 634.0  
 1885.20 0.00 0.00 636.0 1885.20 0.00 0.00 640.0 1885.30 0.00 0.00 0.00 643.0  
 1885.30 0.00 0.00 649.0 1885.30 0.00 0.00 653.0 1885.38 0.00 0.00 0.00 669.3  
 1885.46 0.00 0.00 685.7 1885.53 0.00 0.00 702.0 1885.61 0.00 0.00 0.00 718.3  
 1885.69 0.00 0.00 734.7 1885.77 0.00 0.00 751.0 1885.84 0.00 0.00 0.00 767.3  
 1885.92 0.00 0.00 783.7 1886.00 0.00 0.00 800.0

ID  
 21 SECTION 2000.00 TIME = 17.03 HRS WS = 1884.02 WIDTH = 324.8

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1884.30 0.00 0.00 237.0 1884.40 0.00 0.00 240.0 1884.40 0.00 0.00 0.00 246.0  
 1884.40 0.00 0.00 249.0 1884.40 0.00 0.00 255.0 1884.40 0.00 0.00 0.00 261.0  
 1884.30 0.00 0.00 265.0 1884.30 0.00 0.00 271.0 1884.30 0.00 0.00 0.00 276.0  
 1884.20 0.00 0.00 288.0 1884.20 0.00 0.00 293.0 1884.10 0.00 0.00 0.00 297.0  
 1884.10 0.00 0.00 301.0 1883.97 0.01 -0.03 303.9 1883.92 0.01 0.02 0.02 308.0  
 1883.91 0.01 0.01 312.0 1883.91 0.01 0.21 314.9 1883.90 0.01 0.30 0.30 316.9  
 1883.90 0.01 0.40 320.0 1883.86 0.01 0.46 322.9 1883.81 0.01 0.41 0.41 326.0  
 1883.79 0.01 0.49 340.0 1883.79 0.01 0.49 342.0 1883.78 0.01 0.48 0.48 347.0  
 1883.76 0.01 0.46 354.1 1883.77 0.01 0.37 358.0 1883.76 0.01 0.36 0.36 363.0  
 1883.75 0.01 0.35 367.0 1883.73 0.01 0.33 379.0 1883.72 0.01 0.32 0.32 382.0  
 1883.66 0.02 0.36 385.0 1883.71 0.01 0.41 390.0 1883.45 0.02 0.25 0.25 397.0  
 1883.09 0.02 -0.01 404.0 1882.67 0.03 -0.33 409.0 1882.35 0.03 -0.55 0.55 413.0  
 1882.27 0.03 -0.63 417.0 1882.17 0.03 -0.73 423.0 1882.03 0.03 -0.87 0.87 430.0  
 1882.25 0.03 -0.75 431.0 1882.16 0.03 -0.84 435.0 1882.13 0.03 -0.87 0.87 437.0  
 1881.84 0.03 -1.06 440.0 1881.68 0.03 -1.22 448.0 1881.58 0.03 -1.32 0.32 453.0  
 1881.54 0.03 -1.36 455.0 1881.26 0.04 -1.54 459.0 1881.22 0.04 -1.58 0.58 463.0  
 1881.22 0.04 -1.58 467.0 1881.49 0.04 -1.41 472.0 1881.75 0.03 -1.24 0.24 474.0

1882.40 0.03 -0.85 484.7 1883.67 0.02 0.17 495.1 1883.67 0.02 0.07 498.0  
 1883.68 0.02 0.08 500.0 1883.68 0.02 0.08 503.0 1883.71 0.01 0.21 515.4  
 1883.66 0.02 0.26 527.9 1883.70 0.01 0.20 544.6 1883.72 0.01 0.12 561.0  
 1883.73 0.01 0.13 567.1 1883.72 0.01 0.05 579.7 1883.73 0.01 0.00 592.3  
 1883.73 0.01 -0.07 605.2 1883.78 0.01 -0.22 619.3 1884.20 0.00 0.00 633.0  
 1884.40 0.00 0.00 650.0 1884.40 0.00 0.00 658.0 1884.50 0.00 0.00 661.0  
 1884.50 0.00 0.00 664.0 1884.40 0.00 0.00 671.0 1884.50 0.00 0.00 678.0  
 1884.60 0.00 0.00 689.0 1884.70 0.00 0.00 695.0 1884.70 0.00 0.00 699.0  
 1884.80 0.00 0.00 704.0 1884.80 0.00 0.00 708.0 1884.90 0.00 0.00 711.0  
 1884.90 0.00 0.00 713.0 1885.00 0.00 0.00 718.0 1885.00 0.00 0.00 724.0  
 1884.90 0.00 0.00 726.0 1884.90 0.00 0.00 741.0 1884.90 0.00 0.00 744.0  
 1884.90 0.00 0.00 746.0 1885.00 0.00 0.00 751.0 1884.90 0.00 0.00 754.0  
 1884.90 0.00 0.00 757.0 1884.90 0.00 0.00 765.0 1884.90 0.00 0.00 769.0  
 1884.90 0.00 0.00 775.0 1884.80 0.00 0.00 779.0 1884.80 0.00 0.00 783.0  
 1884.80 0.00 0.00 786.0 1884.70 0.00 0.00 789.0 1884.60 0.00 0.00 797.0

ID  
 20 SECTION 1900.00 TIME = 17.03 HRS WS = 1883.12 WIDTH = 291.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1883.60 0.00 0.00 220.0 1883.60 0.00 0.00 225.0 1883.60 0.00 0.00 228.0  
 1883.50 0.00 0.00 231.0 1883.50 0.00 0.00 233.0 1883.40 0.00 0.00 235.0  
 1883.30 0.00 0.00 244.0 1883.30 0.00 0.00 246.0 1883.20 0.00 0.00 248.0  
 1883.20 0.00 0.00 252.0 1883.07 -0.01 -0.03 255.0 1882.73 0.00 -0.27 258.7  
 1882.63 0.00 -0.37 262.0 1882.65 0.00 -0.15 268.8 1882.65 0.00 -0.15 274.1  
 1882.56 0.00 -0.14 276.9 1882.52 0.00 -0.18 280.0 1882.54 0.00 0.04 286.9  
 1882.50 0.00 0.20 298.1 1882.47 0.00 0.27 305.0 1882.44 0.00 0.44 314.0  
 1882.35 0.00 0.35 318.0 1882.15 0.01 0.25 324.0 1882.09 0.01 0.18 329.0  
 1881.48 0.01 -0.31 338.0 1881.40 0.01 -0.40 342.0 1880.99 0.01 -0.81 358.0  
 1880.73 0.01 -1.07 367.0 1880.60 0.01 -1.20 371.0 1880.34 0.01 -1.46 379.0  
 1880.08 0.01 -1.72 386.0 1880.08 0.01 -1.72 390.0 1880.97 0.01 -0.93 392.0  
 1881.56 0.01 -0.37 408.8 1881.89 0.01 -0.06 425.5 1882.10 0.01 0.13 442.2  
 1882.37 0.00 0.37 459.0 1882.70 0.00 0.50 475.0 1882.72 0.00 0.42 488.0  
 1882.73 0.00 0.33 493.0 1882.71 0.00 0.11 502.0 1882.71 0.00 0.11 506.1  
 1882.71 0.00 0.02 510.1 1882.71 0.00 -0.09 514.1 1882.73 0.00 -0.17 523.0  
 1882.73 0.00 -0.17 526.2 1882.73 0.00 -0.27 530.0 1882.69 0.00 -0.31 535.0  
 1882.82 0.00 -0.18 538.3 1883.07 -0.01 -0.03 540.0 1883.07 -0.01 -0.03 543.0  
 1883.20 0.00 0.00 550.0 1883.20 0.00 0.00 556.0 1883.20 0.00 0.00 558.0  
 1883.20 0.00 0.00 564.0 1883.20 0.00 0.00 566.0 1883.30 0.00 0.00 570.0  
 1883.30 0.00 0.00 573.0 1883.30 0.00 0.00 579.0 1883.30 0.00 0.00 584.0  
 1883.30 0.00 0.00 593.0 1883.25 0.00 0.00 603.5 1883.20 0.00 0.00 614.0  
 1883.20 0.00 0.00 617.0 1883.20 0.00 0.00 623.0 1883.20 0.00 0.00 626.0  
 1883.20 0.00 0.00 632.0 1883.30 0.00 0.00 636.0 1883.40 0.00 0.00 642.0  
 1883.40 0.00 0.00 648.0 1883.50 0.00 0.00 653.0 1883.60 0.00 0.00 656.0  
 1883.70 0.00 0.00 661.0 1883.80 0.00 0.00 671.0 1884.00 0.00 0.00 687.0  
 1883.90 0.00 0.00 690.0 1883.90 0.00 0.00 700.0 1883.85 0.00 0.00 712.5  
 1883.80 0.00 0.00 725.0 1883.80 0.00 0.00 730.0 1883.80 0.00 0.00 734.0  
 1883.90 0.00 0.00 739.0 1883.90 0.00 0.00 746.0 1883.80 0.00 0.00 752.0  
 1883.70 0.00 0.00 759.0 1883.70 0.00 0.00 763.0 1883.70 0.00 0.00 775.0  
 1883.70 0.00 0.00 781.0 1883.70 0.00 0.00 786.0 1883.60 0.00 0.00 800.0

ID  
 19 SECTION 1800.00 TIME = 17.03 HRS WS = 1882.36 WIDTH = 329.8

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1883.50 0.00 0.00 0.0 1883.60 0.00 0.00 2.0 1883.60 0.00 0.00 6.0  
 1883.40 0.00 0.00 23.0 1883.40 0.00 0.00 25.0 1883.30 0.00 0.00 29.0  
 1883.30 0.00 0.00 32.0 1883.20 0.00 0.00 38.0 1883.20 0.00 0.00 40.0  
 1883.20 0.00 0.00 43.0 1883.10 0.00 0.00 45.0 1883.10 0.00 0.00 49.0  
 1883.10 0.00 0.00 56.0 1883.00 0.00 0.00 60.0 1883.00 0.00 0.00 62.0

1882.90 0.00 0.00 65.0 1882.90 0.00 0.00 68.0 1882.80 0.00 0.00 71.0  
 1882.80 0.00 0.00 73.0 1882.80 0.00 0.00 78.0 1882.80 0.00 0.00 81.0  
 1882.80 0.00 0.00 85.0 1882.80 0.00 0.00 91.0 1882.80 0.00 0.00 94.0  
 1882.90 0.00 0.00 107.0 1883.00 0.00 0.00 112.0 1883.00 0.00 0.00 118.0  
 1883.00 0.00 0.00 122.0 1883.00 0.00 0.00 127.0 1883.00 0.00 0.00 130.0  
 1883.10 0.00 0.00 135.0 1883.10 0.00 0.00 140.0 1883.10 0.00 0.00 144.0  
 1883.10 0.00 0.00 152.0 1883.10 0.00 0.00 156.0 1883.10 0.00 0.00 158.0  
 1883.00 0.00 0.00 165.0 1883.10 0.00 0.00 171.0 1883.10 0.00 0.00 176.0  
 1883.10 0.00 0.00 179.0 1883.20 0.00 0.00 184.0 1883.20 0.00 0.00 186.0  
 1883.30 0.00 0.00 188.0 1883.30 0.00 0.00 191.0 1883.40 0.00 0.00 197.0  
 1883.50 0.00 0.00 199.0 1883.50 0.00 0.00 202.0 1883.60 0.00 0.00 208.0  
 1883.60 0.00 0.00 220.0 1883.60 0.00 0.00 223.0 1883.50 0.00 0.00 225.0  
 1883.40 0.00 0.00 227.0 1883.20 0.00 0.00 233.0 1883.20 0.00 0.00 235.0  
 1883.20 0.00 0.00 239.0 1883.10 0.00 0.00 242.0 1883.10 0.00 0.00 246.0  
 1882.90 0.00 0.00 252.0 1882.80 0.00 0.00 258.0 1882.70 0.00 0.00 265.0  
 1882.50 0.00 0.00 274.0 1881.98 0.00 -0.32 282.7 1881.97 0.00 -0.13 291.8  
 1881.95 0.00 0.05 303.4 1881.98 0.00 0.28 315.0 1881.74 -0.01 0.34 328.9  
 1881.47 -0.01 0.22 339.5 1881.36 -0.01 0.26 349.9 1881.07 -0.01 0.17 363.0  
 1880.87 -0.01 0.07 369.0 1880.58 -0.02 -0.12 373.0 1880.49 -0.02 -0.21 378.0  
 1880.14 -0.02 -0.46 382.0 1879.81 -0.03 -0.69 386.0 1879.76 -0.03 -0.74 388.0  
 1879.59 -0.03 -0.91 395.0 1879.33 -0.03 -1.07 397.0 1879.25 -0.03 -1.15 400.0  
 1879.20 -0.03 -1.20 403.0 1879.17 -0.03 -1.23 405.0 1879.17 -0.03 -1.23 409.0  
 1879.59 -0.03 -0.91 419.0 1879.90 -0.03 -0.71 421.0 1879.94 -0.03 -0.66 423.0  
 1880.27 -0.02 -0.43 425.0 1880.53 -0.02 -0.27 427.0 1880.60 -0.02 -0.30 432.0  
 1880.64 -0.02 -0.26 434.0 1880.67 -0.02 -0.23 436.0 1880.74 -0.02 -0.16 440.0  
 1880.77 -0.02 -0.13 442.1 1881.46 -0.01 0.26 451.1 1881.88 0.00 0.48 454.9  
 1882.06 0.00 0.46 458.1 1882.20 0.00 0.40 464.0 1882.20 0.00 0.40 469.0  
 1882.20 0.00 0.40 472.0 1882.20 0.00 0.30 477.0 1882.20 0.00 0.30 481.0  
 1882.18 0.00 0.43 490.0 1882.07 0.00 0.47 498.9 1882.09 0.00 0.49 505.0  
 1882.09 0.00 0.59 508.7 1882.15 0.00 0.55 515.0 1882.17 0.00 0.57 522.0  
 1882.18 0.00 0.58 533.5 1882.20 0.00 0.60 545.0 1882.21 0.00 0.51 555.0  
 1882.22 0.00 0.52 558.0 1882.20 0.00 0.40 566.0 1882.21 0.00 0.41 573.0  
 1882.23 0.00 0.33 581.0 1882.23 0.00 0.33 594.0 1882.26 0.00 0.46 604.9  
 1882.67 0.00 0.00 610.0

## ID

18 SECTION 1700.00 TIME = 17.03 HRS WS=1881.49 WIDTH = 242.1

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1882.00 0.00 0.00 524.0 1881.83 0.00 0.00 539.1 1881.61 0.00 -0.06 554.2  
 1879.97 0.00 -1.53 567.8 1881.24 0.00 -0.10 584.4 1881.16 0.00 0.00 599.2  
 1881.08 0.00 0.08 614.6 1881.07 0.00 0.23 629.6 1881.04 0.00 0.38 644.8  
 1881.02 0.00 0.52 660.0 1881.01 0.00 0.51 663.0 1881.04 0.00 0.54 665.0  
 1881.01 0.00 0.61 666.0 1881.01 0.00 0.71 672.0 1881.02 0.00 0.72 673.0  
 1881.01 0.00 0.71 675.0 1881.00 0.00 0.70 678.0 1881.01 0.00 0.81 682.0  
 1881.01 0.00 0.81 684.0 1880.97 0.00 0.77 688.0 1880.97 0.00 0.77 689.0  
 1880.96 0.00 0.76 690.0 1880.95 0.00 0.75 691.0 1880.90 0.00 0.70 697.0  
 1880.63 0.00 0.53 702.0 1880.55 0.00 0.45 706.0 1880.41 0.00 0.31 713.0  
 1879.97 0.00 -0.03 718.0 1879.47 0.01 -0.53 733.7 1878.38 0.01 -1.62 749.3  
 1878.38 0.01 -1.62 765.0 1880.80 0.00 0.60 779.0 1880.94 0.00 0.73 785.0  
 1880.97 0.00 0.77 787.0 1881.39 0.00 1.09 790.0 1881.44 0.00 1.14 793.0  
 1881.44 0.00 1.13 793.8 1881.44 0.00 1.04 795.9 1881.44 0.00 1.04 797.0  
 1881.87 0.00 0.00 800.0

## ID

17 SECTION 1600.00 TIME = 17.03 HRS WS=1880.77 WIDTH = 217.3

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1881.30 0.00 0.00 496.0 1881.40 0.00 0.00 511.0 1881.40 0.00 0.00 513.0  
 1881.40 0.00 0.00 516.0 1881.40 0.00 0.00 520.0 1881.40 0.00 0.00 521.0

1881.40 0.00 0.00 523.0 1881.40 0.00 0.00 525.0 1881.40 0.00 0.00 526.0  
 1881.40 0.00 0.00 528.0 1881.30 0.00 0.00 538.0 1881.30 0.00 0.00 539.0  
 1881.30 0.00 0.00 541.0 1881.30 0.00 0.00 542.0 1881.30 0.00 0.00 545.0  
 1881.20 0.00 0.00 546.0 1881.20 0.00 0.00 548.0 1881.20 0.00 0.00 549.0  
 1881.20 0.00 0.00 550.0 1881.20 0.00 0.00 552.0 1881.20 0.00 0.00 553.0  
 1881.10 0.00 0.00 556.0 1881.10 0.00 0.00 559.0 1881.00 0.00 0.00 563.0  
 1881.00 0.00 0.00 564.0 1881.00 0.00 0.00 565.0 1880.90 0.00 0.00 566.0  
 1880.90 0.00 0.00 567.0 1880.80 0.00 0.00 571.0 1880.80 0.00 0.00 575.0  
 1880.80 0.00 0.00 578.0 1880.80 0.00 0.00 581.0 1880.46 -0.02 -0.29 591.3  
 1880.29 0.00 -0.41 601.4 1880.21 0.00 -0.39 604.8 1880.22 0.00 -0.38 608.0  
 1880.22 0.00 -0.38 611.0 1880.22 0.00 -0.38 613.0 1880.20 0.00 -0.30 618.8  
 1880.21 0.00 -0.29 621.0 1880.19 0.00 -0.21 624.8 1880.19 0.00 -0.11 631.9  
 1880.18 0.00 -0.12 636.0 1880.20 0.00 -0.10 641.0 1880.19 0.00 -0.01 644.8  
 1880.18 0.00 -0.02 648.0 1880.17 0.00 -0.03 652.0 1880.16 0.00 -0.04 654.0  
 1880.16 0.00 0.06 659.0 1880.18 0.00 0.08 664.0 1880.15 0.00 0.08 675.6  
 1880.16 0.00 0.12 687.3 1880.15 0.00 0.15 699.0 1880.15 0.00 0.25 709.0  
 1880.14 0.00 0.24 713.1 1880.12 0.00 0.32 719.0 1880.12 0.00 0.42 721.0  
 1879.74 0.00 0.21 737.6 1878.95 0.00 -0.42 754.3 1877.74 0.00 -1.46 771.0  
 1877.66 0.00 -1.54 774.0 1877.56 0.00 -1.64 776.0 1877.24 0.00 -1.96 781.0  
 1877.16 0.00 -2.04 782.0 1877.10 0.00 -2.10 784.0 1877.06 0.00 -2.14 786.0  
 1877.03 0.00 -2.17 788.0 1876.98 0.00 -2.22 791.0 1876.97 0.00 -2.13 792.0  
 1876.95 0.00 -2.15 794.0 1877.55 0.01 -1.45 795.0 1878.27 -0.01 -0.73 796.0  
 1879.01 0.00 0.01 797.0 1880.69 0.00 1.69 798.9 1880.97 0.00 0.00 800.0

## ID

16 SECTION 1500.00 TIME = 17.03 HRS WS = 1879.82 WIDTH = 295.7

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1880.80 0.00 0.00 0.0 1880.80 0.00 0.00 6.0 1880.90 0.00 0.00 12.0  
 1880.90 0.00 0.00 17.0 1880.90 0.00 0.00 19.0 1880.90 0.00 0.00 24.0  
 1880.90 0.00 0.00 28.0 1880.90 0.00 0.00 32.0 1880.90 0.00 0.00 35.0  
 1881.00 0.00 0.00 49.0 1881.10 0.00 0.00 51.0 1881.10 0.00 0.00 55.0  
 1881.20 0.00 0.00 57.0 1881.20 0.00 0.00 59.0 1881.20 0.00 0.00 61.0  
 1881.20 0.00 0.00 63.0 1881.30 0.00 0.00 65.0 1881.30 0.00 0.00 67.0  
 1881.30 0.00 0.00 72.0 1881.30 0.00 0.00 79.0 1881.20 0.00 0.00 81.0  
 1881.20 0.00 0.00 83.0 1881.00 0.00 0.00 87.0 1881.00 0.00 0.00 90.0  
 1880.90 0.00 0.00 92.0 1880.80 0.00 0.00 97.0 1880.80 0.00 0.00 102.0  
 1880.70 0.00 0.00 105.0 1880.40 0.00 0.00 108.0 1880.20 0.00 0.00 115.0  
 1880.13 0.00 0.00 131.0 1880.07 0.00 0.00 147.0 1879.41 0.01 -0.59 162.4  
 1880.40 0.00 0.00 172.0 1880.70 0.00 0.00 179.0 1881.00 0.00 0.00 185.0  
 1881.20 0.00 0.00 188.0 1881.20 0.00 0.00 190.0 1881.20 0.00 0.00 195.0  
 1881.20 0.00 0.00 201.0 1881.30 0.00 0.00 216.1 1881.40 0.00 0.00 231.2  
 1881.50 0.00 0.00 246.4 1881.60 0.00 0.00 261.5 1881.70 0.00 0.00 276.6  
 1881.80 0.00 0.00 291.8 1881.90 0.00 0.00 306.9 1882.00 0.00 0.00 322.0  
 1880.80 0.00 0.00 331.0 1879.17 -0.01 -0.83 339.3 1879.33 -0.01 -0.12 354.6  
 1879.35 -0.01 0.45 369.7 1879.23 -0.01 0.33 380.1 1879.21 -0.01 0.21 384.0  
 1879.20 -0.01 0.20 386.0 1879.18 -0.01 0.18 389.0 1879.24 -0.01 0.24 395.0  
 1879.17 -0.01 0.28 404.9 1879.08 -0.01 0.28 407.9 1879.01 -0.01 0.31 410.9  
 1878.80 -0.02 0.40 417.0 1878.14 -0.03 0.03 423.0 1876.99 -0.05 -1.06 438.0  
 1876.34 -0.07 -1.66 453.0 1876.58 -0.07 -1.82 461.2 1877.09 -0.05 -1.86 472.1  
 1879.70 0.00 0.20 482.2 1879.69 0.00 -0.11 488.4 1879.01 -0.01 -0.99 505.5  
 1880.20 0.00 0.00 521.3 1880.40 0.00 0.00 538.0 1880.30 0.00 0.00 545.0  
 1880.30 0.00 0.00 552.0 1880.20 0.00 0.00 563.0 1880.20 0.00 0.00 568.0  
 1880.20 0.00 0.00 574.0 1880.10 0.00 0.00 583.0 1880.10 0.00 0.00 590.0  
 1880.10 0.00 0.00 599.0 1880.10 0.00 0.00 609.0 1880.10 0.00 0.00 619.0  
 1879.09 -0.01 -0.91 624.2 1879.79 0.00 -0.06 640.6 1879.80 0.00 0.10 657.2  
 1879.80 0.00 0.25 673.3 1879.80 0.00 0.41 689.5 1879.79 0.00 0.54 705.6  
 1879.82 0.01 0.72 722.1 1879.94 0.00 0.84 723.8 1880.26 0.00 0.00 728.0

## ID

15 SECTION 1400.00 TIME = 17.03 HRS WS = 1878.91 WIDTH = 247.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1880.30	0.00	0.00	233.0	1880.30	0.00	0.00	237.0	1880.20	0.00	0.00	243.0
1880.20	0.00	0.00	247.0	1880.20	0.00	0.00	255.0	1880.30	0.00	0.00	260.0
1880.40	0.00	0.00	270.0	1880.30	0.00	0.00	272.0	1880.30	0.00	0.00	275.0
1880.30	0.00	0.00	277.0	1880.10	0.00	0.00	282.0	1880.10	0.00	0.00	285.0
1880.10	0.00	0.00	290.0	1880.10	0.00	0.00	294.0	1880.00	0.00	0.00	298.0
1879.90	0.00	0.00	303.0	1879.70	0.00	0.00	313.0	1879.80	0.00	0.00	317.0
1880.00	0.00	0.00	321.0	1880.10	0.00	0.00	324.0	1880.10	0.00	0.00	330.0
1880.10	0.00	0.00	336.0	1879.80	0.00	0.00	342.0	1879.30	0.00	0.00	349.0
1875.92	0.01	-2.08	359.2	1875.90	0.01	-2.00	364.0	1875.91	0.04	-1.89	369.0
1875.90	0.04	-1.79	373.0	1875.90	0.04	-1.70	375.0	1875.90	0.04	-1.60	378.0
1875.92	0.04	-1.58	395.0	1875.90	0.04	-1.50	400.0	1875.90	0.01	-1.50	405.0
1877.45	0.03	0.05	409.0	1877.92	0.03	0.42	412.0	1877.99	0.03	0.49	415.0
1877.88	0.03	0.31	429.6	1878.66	0.01	1.01	443.5	1878.63	0.02	0.90	457.8
1878.67	0.01	0.87	472.0	1878.63	0.02	0.83	479.0	1878.63	0.02	0.73	482.0
1878.63	0.02	0.63	486.1	1878.64	0.01	0.44	492.3	1878.64	0.01	0.24	499.1
1878.64	0.01	0.14	501.3	1878.64	0.01	-0.06	506.2	1878.64	0.01	-0.16	509.3
1878.64	0.01	-0.26	511.2	1878.64	0.01	-0.36	515.0	1877.29	0.00	-1.71	519.2
1879.10	0.00	0.00	522.0	1879.20	0.00	0.00	525.0	1879.30	0.00	0.00	527.0
1879.40	0.00	0.00	530.0	1879.40	0.00	0.00	533.0	1879.30	0.00	0.00	535.0
1879.30	0.00	0.00	537.0	1879.20	0.00	0.00	539.0	1879.10	0.00	0.00	541.0
1878.21	-0.01	-0.79	544.5	1878.67	0.01	-0.23	551.0	1878.67	0.01	-0.13	556.7
1878.66	0.01	-0.04	560.8	1878.67	0.01	0.07	562.9	1878.67	0.01	0.27	573.7
1878.68	0.01	0.58	586.6	1878.69	0.01	0.59	604.2	1878.69	0.01	0.29	606.3
1878.69	0.01	0.09	608.1	1878.70	-0.02	-0.10	611.6	1879.20	0.00	0.00	628.0
1879.20	0.00	0.00	630.0	1879.20	0.00	0.00	633.0	1879.20	0.00	0.00	636.0
1879.20	0.00	0.00	639.0	1879.20	0.00	0.00	641.0	1879.30	0.00	0.00	644.0
1879.30	0.00	0.00	647.0	1879.30	0.00	0.00	649.0	1879.30	0.00	0.00	652.0
1879.30	0.00	0.00	656.0	1879.30	0.00	0.00	658.0	1879.30	0.00	0.00	662.0
1879.20	0.00	0.00	672.0	1879.20	0.00	0.00	674.0	1879.20	0.00	0.00	678.0
1879.20	0.00	0.00	680.0	1879.10	0.00	0.00	686.0	1879.10	0.00	0.00	691.0
1879.10	0.00	0.00	698.0	1879.10	0.00	0.00	703.0	1879.26	0.00	0.00	705.0

ID  
14 SECTION 1300.00 TIME = 17.03 HRS WS=1878.14 WIDTH = 331.3

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1879.30	0.00	0.00	300.0	1879.40	0.00	0.00	302.0	1879.40	0.00	0.00	305.0
1879.40	0.00	0.00	307.0	1879.30	0.00	0.00	309.0	1879.30	0.00	0.00	311.0
1879.20	0.00	0.00	313.0	1879.10	0.00	0.00	315.0	1878.80	0.00	0.00	317.0
1878.70	0.00	0.00	325.0	1878.50	0.00	0.00	332.0	1877.45	-0.01	-0.75	340.4
1877.44	0.00	-0.47	346.6	1877.38	0.00	-0.22	361.0	1877.39	0.00	-0.01	365.9
1877.35	0.00	0.05	373.0	1876.46	0.00	-0.64	379.7	1876.38	0.00	-0.72	383.0
1876.34	0.00	-0.56	387.9	1876.31	0.00	-0.59	391.0	1876.27	0.00	-0.53	394.0
1876.11	0.00	-0.59	397.0	1876.06	0.00	-0.64	400.0	1875.85	0.00	-0.75	402.0
1875.67	0.00	-0.83	404.0	1875.59	0.00	-0.91	412.0	1875.56	0.00	-0.94	415.0
1875.56	0.00	-0.94	418.0	1875.72	0.00	-0.83	427.5	1875.93	0.00	-0.67	437.0
1876.17	0.00	-0.53	440.0	1876.22	0.00	-0.48	443.0	1876.27	0.00	-0.43	446.0
1876.66	0.00	-0.14	450.0	1876.72	0.00	-0.08	454.0	1876.96	0.00	0.17	471.0
1877.02	0.00	0.22	475.0	1877.06	0.00	0.26	478.0	1877.20	0.00	0.30	482.0
1877.24	0.00	0.34	486.0	1877.26	0.00	0.26	491.0	1877.27	0.00	0.27	493.1
1877.32	0.00	0.22	499.0	1877.35	0.00	0.25	503.0	1877.42	0.00	0.22	508.2
1877.81	0.00	0.51	512.0	1877.77	0.00	0.42	524.5	1877.81	0.00	0.41	537.0
1877.81	0.00	0.51	539.0	1877.82	0.00	0.52	542.0	1877.73	0.00	0.43	546.1
1878.04	0.00	0.39	559.6	1878.03	-0.01	0.03	573.0	1878.16	0.00	0.26	577.0
1877.98	-0.01	0.28	593.8	1878.05	-0.01	0.45	599.9	1878.05	0.00	0.45	604.0
1878.05	0.00	0.45	608.0	1878.05	0.00	0.55	610.8	1878.05	-0.01	0.55	617.1
1878.06	-0.01	0.46	628.0	1878.06	-0.01	0.46	633.0	1878.06	-0.01	0.46	638.0
1878.05	0.00	0.35	642.0	1878.06	0.00	0.36	650.0	1878.05	-0.01	0.25	657.0

1878.06 -0.01 0.26 662.0 1878.16 0.00 0.26 671.0 1878.16 0.00 0.26 680.0  
 1878.16 0.00 0.26 685.0 1878.16 0.00 0.26 692.0 1878.16 0.00 0.26 694.0  
 1878.16 0.00 0.26 697.0 1878.16 0.00 0.26 701.0 1878.16 0.00 0.26 709.0  
 1878.16 0.00 0.26 713.0 1878.16 0.00 0.26 717.0 1878.48 0.00 0.00 722.0

ID  
 13 SECTION 1200.00 TIME = 17.03 HRS WS = 1877.31 WIDTH = 405.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1877.61	0.00	0.00	251.0	1877.50	0.00	0.00	255.0	1877.50	0.00	0.00	259.0
1877.60	0.00	0.00	267.0	1877.73	0.00	0.00	280.7	1877.87	0.00	0.00	294.3
1878.00	0.00	0.00	308.0	1878.10	0.00	0.00	313.0	1878.20	0.00	0.00	319.0
1878.20	0.00	0.00	326.0	1878.10	0.00	0.00	331.0	1878.00	0.00	0.00	335.0
1877.13	0.00	-0.02	346.9	1875.48	-0.01	-0.82	358.3	1875.37	-0.01	-0.53	368.8
1875.33	-0.01	-0.57	374.0	1875.32	-0.02	-0.48	379.0	1875.29	-0.02	-0.41	382.0
1875.28	-0.02	-0.33	385.0	1875.27	-0.02	-0.23	387.0	1875.21	-0.02	-0.19	392.0
1875.17	-0.02	-0.13	400.0	1875.17	-0.02	-0.13	403.0	1875.08	-0.02	-0.22	414.0
1875.12	-0.02	-0.18	416.0	1875.12	-0.02	-0.18	422.0	1875.41	-0.02	0.01	426.0
1876.21	-0.01	0.51	429.0	1876.56	-0.01	0.79	445.2	1876.74	-0.01	0.90	461.3
1876.77	-0.01	0.87	477.5	1876.81	0.00	0.85	493.7	1876.83	0.00	0.79	509.9
1876.85	0.00	0.75	526.1	1876.87	0.00	0.47	531.1	1876.88	0.00	0.33	542.7
1876.89	0.00	0.19	554.0	1876.90	0.00	0.35	563.3	1876.91	0.00	0.51	572.9
1876.92	0.00	0.52	577.0	1876.92	0.00	0.62	579.0	1876.92	0.00	0.62	582.0
1876.92	0.00	0.62	584.0	1876.93	0.00	0.63	589.0	1876.94	0.00	0.64	591.0
1876.93	0.00	0.63	594.0	1876.94	0.00	0.54	597.0	1876.95	0.00	0.55	604.0
1876.96	0.00	0.46	608.0	1876.96	0.00	0.46	612.1	1876.95	0.00	0.35	615.0
1876.96	0.00	0.36	618.0	1876.97	0.00	0.37	622.0	1876.97	0.00	0.27	624.0
1876.97	0.00	0.27	627.0	1876.98	0.00	0.28	630.0	1876.98	0.00	0.28	633.0
1876.98	0.00	0.28	635.0	1876.99	0.00	0.29	640.0	1876.99	0.00	0.29	645.0
1877.00	0.00	0.30	650.0	1877.00	0.00	0.30	653.1	1877.01	0.00	0.21	658.0
1877.01	0.00	0.31	661.9	1877.01	0.00	0.31	667.0	1877.02	0.00	0.32	672.0
1877.02	0.00	0.32	678.0	1877.03	0.00	0.33	686.0	1877.03	0.00	0.33	688.0
1877.04	0.00	0.34	691.1	1877.06	0.00	0.26	694.3	1877.27	0.00	0.37	696.0
1877.27	0.00	0.27	698.0	1877.27	0.00	0.27	700.0	1877.27	0.00	0.17	702.0
1877.27	0.00	0.17	705.0	1877.27	0.00	0.17	707.0	1877.27	0.00	0.17	712.0
1877.28	0.00	0.18	721.0	1877.28	0.00	0.18	725.0	1877.27	0.00	0.17	733.0
1877.27	0.00	0.17	745.0	1877.30	0.00	0.20	747.0	1877.32	0.00	0.22	750.9
1877.61	0.00	0.00	753.0								

ID  
 12 SECTION 1100.00 TIME = 17.03 HRS WS = 1876.08 WIDTH = 348.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1876.50	0.00	0.00	231.0	1876.55	0.00	0.00	245.5	1876.60	0.00	0.00	260.0
1876.60	0.00	0.00	266.0	1876.50	0.00	0.00	269.0	1876.50	0.00	0.00	277.0
1876.50	0.00	0.00	284.0	1876.50	0.00	0.00	289.0	1876.50	0.00	0.00	293.0
1876.50	0.00	0.00	297.0	1876.30	0.00	0.00	303.0	1876.40	0.00	0.00	305.0
1876.50	0.00	0.00	309.0	1876.50	0.00	0.00	312.0	1876.50	0.00	0.00	314.0
1876.30	0.00	0.00	325.0	1875.71	0.00	-0.39	335.7	1874.39	-0.02	-1.31	350.4
1874.36	-0.02	-0.94	367.0	1874.35	-0.02	-0.55	382.9	1874.35	-0.02	-0.15	399.0
1874.35	-0.02	0.05	408.0	1874.34	-0.02	0.24	417.0	1875.50	-0.01	1.40	432.0
1875.68	-0.01	1.38	437.0	1875.71	-0.01	1.21	440.0	1875.71	-0.01	1.11	444.0
1875.73	-0.01	1.43	458.0	1875.66	-0.01	1.46	465.0	1875.67	-0.01	1.47	470.0
1875.67	-0.01	1.47	472.0	1875.70	-0.01	1.31	478.0	1875.72	-0.01	1.22	480.0
1875.72	-0.01	1.22	483.0	1875.73	-0.01	1.13	486.0	1875.73	-0.01	1.03	489.0
1875.73	-0.01	0.93	493.0	1875.73	-0.01	0.82	507.4	1875.69	-0.01	0.66	521.7
1875.70	-0.01	0.55	536.2	1875.71	-0.01	0.44	550.5	1875.72	-0.01	0.33	564.7
1875.72	-0.01	0.22	579.0	1875.73	-0.01	0.33	584.0	1875.73	-0.01	0.33	587.0
1875.73	-0.01	0.43	589.9	1875.74	-0.01	0.44	603.1	1875.74	-0.01	0.34	606.0
1875.73	-0.01	0.23	609.0	1875.73	-0.01	0.23	613.0	1875.73	-0.01	0.23	619.0

1875.70	-0.01	0.30	627.0	1875.74	-0.01	0.34	632.0	1875.74	-0.01	0.24	634.0
1875.70	-0.01	0.20	638.0	1875.70	-0.01	0.20	641.0	1875.71	-0.01	0.21	646.1
1875.71	-0.01	0.06	655.3	1875.72	0.00	-0.08	664.5	1875.72	0.00	-0.18	666.3
1875.71	0.00	-0.29	669.2	1875.72	0.00	-0.38	671.0	1875.78	0.01	-0.32	674.3
1876.20	0.00	0.00	678.0	1876.20	0.00	0.00	682.0	1876.30	0.00	0.00	685.0
1876.30	0.00	0.00	688.0	1876.30	0.00	0.00	694.0	1876.30	0.00	0.00	697.0
1876.30	0.00	0.00	702.0	1876.40	0.00	0.00	704.0				

ID  
11 SECTION 1000.00 TIME = 17.03 HRS WS = 1875.00 WIDTH = 590.5

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1875.20	0.00	0.00	0.0	1874.60	0.00	0.10	3.9	1874.45	0.01	0.05	9.9
1874.42	0.01	0.02	16.0	1874.41	0.01	0.11	18.0	1874.40	0.01	0.10	21.0
1874.40	0.01	0.10	23.0	1874.39	0.01	0.09	27.0	1874.38	0.01	0.08	31.0
1874.35	0.01	0.14	40.0	1874.33	0.01	0.13	47.0	1874.12	0.01	0.02	56.0
1873.88	0.01	-0.17	72.0	1873.57	0.01	-0.42	88.0	1873.01	0.01	-0.89	103.0
1872.94	0.01	-0.96	109.0	1872.86	0.01	-1.04	116.0	1872.54	0.01	-1.26	123.0
1872.94	0.01	-0.95	138.0	1873.42	0.01	-0.58	140.0	1873.86	0.01	-0.23	144.0
1873.91	0.01	-0.29	148.0	1873.85	0.01	-0.45	155.1	1874.67	0.00	0.17	164.0
1874.05	0.01	-0.35	175.9	1874.10	0.01	-0.20	188.0	1874.12	0.01	-0.08	192.0
1874.14	0.01	-0.06	197.0	1874.18	0.01	-0.22	207.1	1874.65	0.00	0.15	211.0
1874.81	0.00	0.21	213.0	1874.81	0.00	0.21	215.0	1874.82	0.00	0.12	218.0
1874.82	0.00	0.12	222.0	1874.82	0.00	0.22	233.0	1874.82	0.00	0.22	238.0
1874.82	0.00	0.22	244.0	1874.82	0.00	0.22	249.0	1874.83	0.00	0.13	251.0
1874.82	0.00	0.12	253.0	1874.71	0.00	-0.09	256.2	1874.88	0.00	-0.02	260.0
1874.74	0.00	-0.16	263.1	1874.97	-0.03	-0.03	267.0	1875.10	0.00	0.00	273.0
1875.20	0.00	0.00	276.0	1875.20	0.00	0.00	280.0	1875.30	0.00	0.00	284.0
1875.30	0.00	0.00	290.0	1875.40	0.00	0.00	294.0	1875.40	0.00	0.00	296.0
1875.50	0.00	0.00	298.0	1875.50	0.00	0.00	301.0	1875.60	0.00	0.00	303.0
1875.60	0.00	0.00	305.0	1875.60	0.00	0.00	307.0	1875.70	0.00	0.00	309.0
1875.70	0.00	0.00	311.0	1875.70	0.00	0.00	314.0	1875.60	0.00	0.00	317.0
1875.60	0.00	0.00	322.0	1875.70	0.00	0.00	325.0	1875.60	0.00	0.00	327.0
1875.50	0.00	0.00	329.0	1875.50	0.00	0.00	331.0	1875.50	0.00	0.00	333.0
1875.40	0.00	0.00	336.0	1875.40	0.00	0.00	340.0	1875.30	0.00	0.00	344.0
1875.40	0.00	0.00	347.0	1875.30	0.00	0.00	351.0	1875.20	0.00	0.00	353.0
1875.10	0.00	0.00	356.0	1874.97	-0.03	-0.03	360.0	1874.75	0.00	-0.15	366.9
1874.75	0.00	-0.05	370.8	1874.84	0.00	0.04	373.0	1874.85	0.00	0.15	379.0
1874.84	0.00	0.25	385.0	1874.60	0.00	0.20	391.9	1874.70	0.00	0.30	396.0
1874.65	0.00	0.45	405.0	1874.68	0.00	0.49	420.8	1874.69	0.00	0.53	436.6
1874.71	0.00	0.57	452.4	1874.72	0.00	0.60	468.2	1874.73	0.00	0.63	484.0
1874.73	0.00	0.53	487.0	1874.73	0.00	0.43	490.0	1874.71	0.00	0.31	493.1
1874.86	0.00	0.26	496.0	1874.86	0.00	0.16	504.0	1874.86	0.00	0.16	506.0
1874.86	0.00	0.06	508.0	1874.86	0.00	0.06	510.0	1874.86	0.00	0.06	514.0
1874.86	0.00	0.06	517.0	1874.86	0.00	0.06	523.0	1874.79	0.00	-0.01	526.2
1874.89	0.00	-0.01	530.0	1874.89	0.00	-0.01	533.0	1874.76	0.00	-0.14	535.1
1874.97	-0.03	-0.03	538.0	1874.97	-0.03	-0.03	541.0	1875.10	0.00	0.00	548.0
1875.10	0.00	0.00	551.0	1875.10	0.00	0.00	554.0	1875.10	0.00	0.00	560.0
1875.10	0.00	0.00	563.0	1875.10	0.00	0.00	568.0	1874.97	-0.03	-0.03	572.0
1874.97	-0.03	-0.03	576.0	1874.76	0.00	-0.14	577.9	1874.87	0.00	-0.03	581.0
1874.79	0.00	-0.01	583.8	1874.86	0.00	0.06	587.0	1874.86	0.00	0.07	589.0
1874.86	0.00	0.16	595.0	1874.86	0.00	0.26	598.0	1874.85	0.00	0.35	601.0
1874.76	0.00	0.36	603.9	1874.76	0.00	0.46	608.0	1874.76	0.00	0.55	612.0
1874.76	0.00	0.55	617.0	1874.76	0.00	0.66	621.0	1874.76	0.00	0.66	627.0
1874.76	0.00	0.66	632.0	1874.76	0.00	0.55	637.0	1874.76	0.00	0.46	643.0
1874.78	0.00	0.48	649.1	1874.86	0.00	0.36	656.0	1874.87	0.00	0.27	660.0
1874.87	0.00	0.17	663.0	1874.87	0.00	0.17	668.0	1874.86	0.00	0.16	672.0
1874.86	0.00	0.07	675.0	1874.86	0.00	0.07	677.0	1874.88	0.00	0.08	688.5
1874.89	0.00	0.08	700.0	1874.88	0.00	-0.02	703.0	1874.92	0.00	0.02	707.0
1874.97	-0.03	-0.03	711.0	1874.97	-0.03	-0.03	715.0	1875.10	0.00	0.00	719.0
1875.20	0.00	0.00	721.0	1875.20	0.00	0.00	724.0	1875.20	0.00	0.00	728.0

1875.20 0.00 0.00 732.0 1875.30 0.00 0.00 736.0 1875.30 0.00 0.00 739.0  
 1875.30 0.00 0.00 744.0 1875.30 0.00 0.00 747.0 1875.30 0.00 0.00 757.0  
 1875.20 0.00 0.00 760.0 1875.20 0.00 0.00 764.0 1875.20 0.00 0.00 772.0  
 1875.20 0.00 0.00 776.0 1875.30 0.00 0.00 778.0 1875.30 0.00 0.00 784.0  
 1875.30 0.00 0.00 790.0 1875.20 0.00 0.00 795.0 1875.20 0.00 0.00 798.0  
 1875.20 0.00 0.00 800.0

## ID

10 SECTION 900.00 TIME = 17.03 HRS WS = 1874.00 WIDTH = 647.4

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1874.20 0.00 0.00 0.0 1873.69 0.00 0.19 4.8 1873.66 0.01 0.16 13.0  
 1873.66 0.01 0.26 15.9 1873.66 0.01 0.26 20.0 1873.66 0.01 0.36 25.0  
 1873.66 0.01 0.36 29.0 1873.66 0.01 0.46 34.0 1873.66 0.01 0.46 38.0  
 1873.66 0.01 0.46 42.0 1873.66 0.01 0.56 44.0 1873.66 0.01 0.56 47.0  
 1873.66 0.01 0.56 50.0 1873.67 0.01 0.67 55.0 1873.58 0.01 0.68 57.0  
 1873.49 0.01 0.69 60.0 1873.49 0.01 0.69 62.0 1873.48 0.01 0.68 67.0  
 1873.48 0.01 0.67 71.0 1873.47 0.01 0.67 73.0 1873.38 0.01 0.68 76.0  
 1873.37 0.01 0.67 81.0 1873.35 0.01 0.65 94.0 1873.25 0.01 0.65 96.0  
 1873.34 0.01 0.64 102.0 1873.34 0.01 0.63 105.0 1873.43 0.01 0.63 108.0  
 1873.52 0.01 0.62 114.0 1873.58 0.01 0.58 117.0 1873.58 0.01 0.48 121.1  
 1873.67 0.01 0.37 127.0 1873.49 0.01 0.09 134.3 1873.53 0.01 -0.07 141.2  
 1873.65 0.01 -0.15 152.2 1873.66 0.01 -0.24 165.1 1873.99 -0.01 -0.01 178.0  
 1873.19 0.01 -0.51 186.6 1873.66 0.01 0.06 190.9 1873.29 0.01 -0.01 193.7  
 1873.62 0.01 0.43 196.0 1873.62 0.01 0.42 206.0 1873.61 0.01 0.41 216.0  
 1873.61 0.01 0.31 220.0 1873.61 0.01 0.31 223.0 1873.60 0.01 0.20 227.1  
 1873.65 0.01 0.15 232.1 1873.48 0.01 -0.12 237.2 1873.43 0.01 -0.37 244.3  
 1873.98 -0.02 -0.02 251.0 1874.10 0.00 0.00 255.0 1874.20 0.00 0.00 261.0  
 1874.20 0.00 0.00 266.0 1874.30 0.00 0.00 268.0 1874.40 0.00 0.00 273.0  
 1874.30 0.00 0.00 281.0 1874.20 0.00 0.00 288.0 1874.10 0.00 0.00 292.0  
 1873.98 -0.02 -0.02 294.0 1873.66 0.01 -0.24 296.9 1873.62 0.01 -0.18 300.8  
 1873.62 0.01 -0.08 305.8 1873.44 0.01 -0.16 313.1 1873.61 0.01 -0.19 323.2  
 1873.77 0.00 -0.13 325.0 1873.61 0.01 -0.19 329.8 1873.61 0.01 -0.08 335.8  
 1873.39 0.01 -0.11 340.8 1873.69 0.00 0.19 343.0 1873.30 0.01 0.00 350.8  
 1873.25 0.01 0.15 356.9 1872.94 0.01 0.04 361.0 1872.98 0.01 0.08 363.0  
 1872.97 0.01 0.07 367.0 1872.77 0.01 -0.03 369.0 1872.76 0.01 -0.04 372.0  
 1872.76 0.01 -0.04 374.0 1872.95 0.01 0.05 377.0 1872.94 0.01 0.04 380.0  
 1872.94 0.01 0.04 382.0 1873.15 0.01 0.14 386.0 1872.92 0.01 0.02 390.0  
 1873.13 0.01 0.13 393.0 1872.91 0.01 0.01 395.0 1872.68 0.01 -0.11 400.0  
 1872.68 0.01 -0.12 403.0 1872.47 0.01 -0.23 405.0 1872.45 0.01 -0.25 410.0  
 1872.28 0.01 -0.32 412.0 1872.40 0.01 -0.25 423.5 1872.53 0.01 -0.18 435.0  
 1872.54 0.01 -0.16 440.0 1872.74 0.01 -0.06 442.0 1872.75 0.01 -0.05 446.0  
 1872.92 0.01 0.02 449.0 1873.22 0.01 0.12 461.6 1873.47 0.01 0.17 474.0  
 1873.02 0.01 0.02 481.9 1873.22 0.01 0.22 486.0 1873.23 0.01 0.23 488.0  
 1873.24 0.01 0.23 491.0 1873.25 0.01 0.25 493.0 1873.39 0.01 0.29 495.0  
 1873.40 0.01 0.30 498.0 1873.42 0.01 0.32 501.0 1873.49 0.01 0.29 504.0  
 1873.49 0.01 0.19 509.0 1873.50 0.01 0.10 516.1 1873.54 0.01 0.04 524.2  
 1873.73 0.01 0.03 531.1 1873.75 0.01 -0.05 538.1 1873.88 0.01 -0.02 545.0  
 1873.88 0.01 -0.02 548.0 1873.78 0.01 -0.12 553.1 1874.00 0.00 0.00 559.0  
 1873.99 -0.01 -0.01 563.0 1874.10 0.00 0.00 567.0 1874.10 0.00 0.00 571.0  
 1874.10 0.00 0.00 574.0 1874.05 0.00 0.00 588.5 1873.99 -0.01 -0.01 603.0  
 1873.82 0.01 -0.08 607.9 1873.90 0.01 -0.02 623.7 1873.89 0.01 -0.05 639.3  
 1873.90 0.01 -0.05 655.0 1873.90 0.01 -0.07 670.7 1873.90 0.01 -0.08 686.4  
 1874.00 0.00 0.00 702.0 1873.99 -0.01 -0.01 705.0 1874.10 0.00 0.00 714.0  
 1874.10 0.00 0.00 721.0 1874.20 0.00 0.00 736.0 1874.20 0.00 0.00 741.0  
 1874.20 0.00 0.00 743.0 1874.10 0.00 0.00 749.0 1873.99 -0.01 -0.01 755.0  
 1873.99 -0.01 -0.01 759.0 1874.10 0.00 0.00 769.0 1873.99 -0.01 -0.01 774.0  
 1874.00 0.00 0.00 783.5 1874.00 0.00 0.00 793.0 1874.00 0.00 0.00 795.0  
 1874.20 0.00 0.00 799.0

## ID

9 SECTION 800.00 TIME = 17.03 HRS WS =1872.83 WIDTH = 646.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1873.06	0.00	0.00	0.0	1871.96	-0.03	0.16	3.9	1870.28	-0.06	-1.52	8.0
1870.43	-0.06	-1.37	23.0	1871.27	-0.05	-0.73	26.0	1871.38	-0.04	-0.62	42.4
1871.48	-0.04	-0.52	58.9	1871.57	-0.04	-0.43	75.3	1871.66	-0.03	-0.34	91.7
1871.74	-0.03	-0.26	108.1	1871.81	-0.03	-0.19	124.6	1871.88	-0.02	-0.12	141.0
1872.15	-0.02	0.05	149.0	1872.34	-0.01	0.14	152.0	1872.34	-0.01	0.16	166.5
1872.33	-0.01	0.18	181.0	1872.31	-0.01	0.19	195.5	1872.30	-0.01	0.20	210.0
1872.38	-0.01	0.18	215.0	1872.53	-0.01	0.13	221.1	1872.68	0.00	0.08	229.1
1872.72	0.00	0.02	236.0	1872.69	0.00	-0.01	245.1	1872.77	0.00	-0.03	249.0
1872.90	0.00	0.00	251.0	1873.00	0.00	0.00	254.0	1873.00	0.00	0.00	257.0
1873.10	0.00	0.00	259.0	1873.00	0.00	0.00	262.0	1872.90	0.00	0.00	264.0
1872.77	0.00	-0.03	266.0	1872.79	0.00	-0.01	270.0	1872.77	0.00	-0.03	272.0
1872.90	0.00	0.00	274.0	1873.10	0.00	0.00	275.0	1873.10	0.00	0.00	277.0
1873.10	0.00	0.00	282.0	1873.20	0.00	0.00	289.0	1873.10	0.00	0.00	292.0
1873.00	0.00	0.00	294.0	1873.00	0.00	0.00	296.0	1872.90	0.00	0.00	299.0
1872.90	0.00	0.00	302.0	1872.78	0.00	-0.02	306.0	1872.70	0.00	0.00	310.9
1872.70	0.00	0.10	315.9	1872.51	-0.01	0.21	322.9	1872.63	0.00	0.36	339.5
1872.62	0.00	0.38	356.0	1872.61	0.00	0.40	372.5	1872.61	0.00	0.43	389.0
1872.61	0.00	0.46	405.5	1872.60	0.00	0.48	422.0	1872.59	0.00	0.50	438.5
1872.58	0.00	0.52	455.0	1872.57	0.00	0.54	471.5	1872.56	0.00	0.56	488.0
1872.62	0.00	0.52	493.0	1872.66	0.00	0.46	499.0	1872.70	0.00	0.40	503.0
1872.69	0.00	0.39	507.0	1872.71	0.00	0.31	511.0	1872.70	0.00	0.30	513.1
1872.75	0.00	0.25	517.0	1872.75	0.00	0.25	525.0	1872.70	0.00	0.30	526.9
1872.71	0.00	0.31	534.0	1872.71	0.00	0.31	536.0	1872.70	0.00	0.30	542.1
1872.75	0.00	0.25	545.0	1872.75	0.00	0.25	547.0	1872.74	0.00	0.14	550.1
1872.75	0.00	0.05	552.0	1872.75	0.00	0.05	555.0	1872.73	0.00	0.03	557.1
1872.80	0.00	0.00	559.0	1872.80	0.00	0.00	563.0	1872.78	0.00	-0.02	570.0
1872.90	0.00	0.00	572.0	1873.00	0.00	0.00	575.0	1872.90	0.00	0.00	578.0
1873.00	0.00	0.00	583.0	1873.00	0.00	0.00	586.0	1873.10	0.00	0.00	589.0
1873.20	0.00	0.00	591.0	1873.20	0.00	0.00	594.0	1873.20	0.00	0.00	598.0
1873.10	0.00	0.00	600.0	1872.90	0.00	0.00	602.0	1872.90	0.00	0.00	604.0
1872.78	0.00	-0.02	606.0	1872.73	0.00	0.03	607.9	1872.74	0.00	0.14	609.9
1872.75	0.00	0.25	612.0	1872.70	0.00	0.30	613.9	1872.71	0.00	0.31	616.0
1872.70	0.00	0.40	618.0	1872.67	0.00	0.47	621.0	1872.67	0.00	0.47	625.0
1872.67	0.00	0.47	628.0	1872.63	0.00	0.53	633.0	1872.67	0.00	0.47	640.0
1872.67	0.00	0.47	646.0	1872.70	0.00	0.40	651.0	1872.67	0.00	0.47	654.0
1872.69	0.00	0.48	658.0	1872.70	0.00	0.40	668.0	1872.70	0.00	0.40	671.0
1872.75	0.00	0.35	675.0	1872.75	0.00	0.25	681.0	1872.77	0.00	0.17	686.0
1872.79	0.00	0.09	697.0	1872.80	0.00	0.00	700.0	1872.78	0.00	-0.02	704.0
1872.90	0.00	0.00	710.0	1872.90	0.00	0.00	715.0	1873.00	0.00	0.00	717.0
1873.00	0.00	0.00	720.0	1873.00	0.00	0.00	723.0	1872.90	0.00	0.00	726.0
1872.90	0.00	0.00	729.0	1872.90	0.00	0.00	731.0	1872.90	0.00	0.00	736.0
1872.90	0.00	0.00	738.0	1872.78	0.00	-0.02	740.0	1872.79	0.00	-0.01	746.0
1872.79	0.00	-0.01	751.0	1872.82	0.00	0.02	760.0	1872.90	0.00	0.00	764.0
1872.90	0.00	0.00	767.0	1872.90	0.00	0.00	771.0	1873.00	0.00	0.00	777.0
1873.10	0.00	0.00	780.0	1873.20	0.00	0.00	784.0	1873.20	0.00	0.00	786.0
1873.20	0.00	0.00	793.0	1873.20	0.00	0.00	797.0				

ID  
8 SECTION 700.00 TIME = 17.03 HRS WS =1871.93 WIDTH = 658.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1872.16	0.00	0.00	0.0	1870.93	0.01	0.23	1.8	1870.21	0.01	-0.49	8.0
1870.36	0.01	-0.44	11.0	1870.37	0.01	-0.43	14.0	1870.38	0.01	-0.42	18.0
1870.57	0.01	-0.33	31.0	1870.58	0.01	-0.32	36.0	1870.60	0.01	-0.30	43.0
1870.61	0.01	-0.29	47.0	1870.63	0.01	-0.27	53.0	1870.65	0.01	-0.25	60.0
1870.84	0.01	-0.16	66.0	1870.85	0.01	-0.15	70.0	1870.86	0.01	-0.14	73.0
1870.87	0.01	-0.13	76.0	1870.88	0.01	-0.12	79.0	1870.70	0.01	-0.20	81.0

1870.71 0.01 -0.19 84.0 1870.72 0.01 -0.18 87.0 1870.91 0.01 -0.09 89.0  
 1870.92 0.01 -0.08 92.0 1870.94 0.01 -0.06 98.0 1870.95 0.01 -0.05 101.0  
 1871.19 0.01 0.08 104.0 1870.97 0.01 -0.03 108.0 1870.98 0.01 -0.02 114.0  
 1871.20 0.01 0.10 117.0 1871.37 0.01 0.16 119.0 1871.36 0.01 0.16 122.0  
 1871.37 0.01 0.17 125.0 1871.43 0.01 0.13 128.0 1871.38 0.01 0.18 131.0  
 1871.38 0.01 0.18 134.0 1871.38 0.01 0.18 137.0 1871.24 0.01 0.14 141.0  
 1871.25 0.01 0.15 143.0 1871.06 0.01 0.06 145.0 1871.08 0.01 0.08 151.0  
 1870.91 0.01 0.01 159.0 1871.02 0.01 0.07 168.5 1871.14 0.01 0.14 178.0  
 1871.15 0.01 0.15 181.0 1871.17 0.01 0.17 189.0 1871.17 0.01 0.17 192.0  
 1871.33 0.01 0.23 194.0 1871.33 0.01 0.23 196.0 1871.45 0.01 0.25 201.0  
 1871.50 0.01 0.20 208.0 1871.46 0.01 0.26 211.0 1871.50 0.01 0.25 220.0  
 1871.52 0.01 0.22 229.0 1871.52 0.01 0.22 233.0 1871.49 0.01 0.19 238.1  
 1871.63 0.00 0.23 244.0 1871.64 0.00 0.23 250.0 1871.64 0.00 0.14 254.1  
 1871.65 0.00 0.05 258.0 1871.36 0.01 -0.24 262.2 1871.75 0.00 -0.05 274.0  
 1871.69 0.00 -0.11 277.1 1871.80 -0.02 -0.10 284.0 1871.78 -0.04 -0.15 300.4  
 1871.97 0.00 0.00 316.7 1872.00 0.00 0.00 333.0 1871.53 -0.02 -0.27 349.3  
 1871.42 0.01 -0.18 365.8 1871.68 0.00 0.08 371.0 1871.67 0.00 0.17 382.4  
 1871.68 0.00 0.28 394.0 1871.68 0.00 0.28 398.0 1871.68 0.00 0.28 402.0  
 1871.62 0.00 0.32 407.9 1871.64 0.00 0.34 412.0 1871.64 0.00 0.34 415.0  
 1871.63 0.00 0.43 422.0 1871.64 0.00 0.44 427.0 1871.64 0.00 0.44 431.0  
 1871.66 0.00 0.36 434.0 1871.64 0.00 0.44 437.0 1871.64 0.00 0.44 439.0  
 1871.64 0.00 0.44 442.0 1871.60 0.00 0.50 448.0 1871.54 0.01 0.54 452.0  
 1871.54 0.01 0.54 454.0 1871.54 0.01 0.54 456.0 1871.48 0.01 0.57 458.0  
 1871.49 0.01 0.59 475.0 1871.49 0.01 0.59 483.0 1871.56 0.01 0.56 486.0  
 1871.63 0.00 0.53 488.0 1871.68 0.00 0.48 491.0 1871.70 0.00 0.30 493.0  
 1871.70 0.00 0.30 495.0 1871.70 0.00 0.20 509.9 1871.67 0.00 0.07 524.8  
 1871.72 0.00 0.02 539.6 1871.70 0.00 -0.10 554.4 1871.78 -0.02 -0.12 569.3  
 1872.00 0.00 0.00 584.0 1872.10 0.00 0.00 588.0 1872.10 0.00 0.00 590.0  
 1872.20 0.00 0.00 595.0 1872.20 0.00 0.00 598.0 1872.20 0.00 0.00 608.0  
 1872.10 0.00 0.00 623.8 1872.00 0.00 0.00 639.7 1871.78 -0.02 -0.12 655.4  
 1871.70 0.00 -0.10 671.2 1871.72 0.00 0.02 687.0 1871.67 0.00 0.07 702.9  
 1871.72 0.00 0.12 708.0 1871.71 0.00 0.21 711.9 1871.71 0.00 0.21 716.0  
 1871.71 0.00 0.31 719.0 1871.71 0.00 0.31 725.0 1871.74 0.00 0.24 728.1  
 1871.75 0.00 0.05 737.1 1871.80 -0.02 -0.10 744.1 1872.00 0.00 0.00 751.0  
 1872.10 0.00 0.00 755.0 1872.20 0.00 0.00 760.0 1872.20 0.00 0.00 772.0  
 1872.16 0.00 0.00 780.0

**ID**  
 7 SECTION 600.00 TIME = 17.03 HRS WS =1870.90 WIDTH = 686.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1871.22	0.00	0.00	0.0	1870.42	0.00	0.42	16.3	1870.41	0.00	0.41	33.4
1870.41	0.00	0.41	50.1	1870.41	0.00	0.41	66.8	1870.41	0.00	0.41	83.5
1870.41	0.00	0.41	100.2	1870.41	0.00	0.41	116.9	1870.41	0.00	0.41	133.6
1870.41	0.00	0.41	150.3	1870.40	0.00	0.40	167.0	1870.40	0.00	0.20	176.0
1870.40	0.00	0.10	191.6	1870.40	0.00	-0.01	207.0	1870.46	0.00	-0.04	214.0
1870.40	0.00	-0.20	218.1	1870.64	0.00	-0.06	221.0	1870.42	0.00	-0.28	224.1
1870.75	0.00	-0.05	227.0	1870.75	0.00	-0.05	230.0	1870.39	0.00	-0.26	243.2
1870.43	0.00	-0.07	257.0	1870.39	0.00	0.04	268.4	1870.38	0.00	0.18	280.0
1870.38	0.00	-0.11	282.2	1870.38	0.00	-0.42	285.3	1871.20	0.00	0.00	302.0
1871.10	0.00	0.00	306.0	1871.10	0.00	0.00	311.0	1871.20	0.00	0.00	314.0
1871.20	0.00	0.00	321.0	1871.30	0.00	0.00	323.0	1871.20	0.00	0.00	329.0
1871.20	0.00	0.00	333.0	1871.10	0.00	0.00	336.0	1870.49	0.00	-0.41	339.8
1870.84	0.00	-0.06	344.0	1870.67	0.00	-0.13	349.0	1870.74	0.00	-0.05	352.0
1870.39	0.00	-0.31	357.9	1870.37	0.00	-0.23	360.9	1870.45	0.00	-0.15	363.0
1870.45	0.00	-0.15	366.0	1870.39	0.00	-0.26	379.1	1870.60	0.00	-0.10	392.0
1870.38	0.00	-0.21	395.9	1870.43	0.00	-0.17	401.0	1870.38	0.00	-0.12	414.0
1870.38	0.00	-0.12	420.0	1870.39	0.00	-0.11	436.0	1870.39	0.00	-0.01	446.0
1870.38	0.00	0.18	455.9	1870.38	0.00	0.18	461.0	1870.38	0.00	0.25	474.7
1870.38	0.00	0.31	488.3	1870.36	0.00	0.36	502.0	1870.38	0.00	0.27	509.0
1870.37	0.00	0.07	518.1	1870.37	0.00	-0.03	524.0	1870.37	0.00	-0.13	531.0

1870.37 0.00 -0.13 536.0 1870.37 0.00 -0.23 542.1 1870.57 0.00 -0.13 545.0  
 1870.38 0.00 -0.32 551.1 1870.64 0.00 -0.16 557.0 1870.62 0.00 -0.28 559.1  
 1870.95 0.00 -0.05 566.0 1870.95 0.00 -0.05 569.0 1870.95 0.00 -0.05 573.0  
 1870.62 0.00 -0.28 575.9 1870.83 0.00 -0.07 578.0 1870.83 0.00 -0.07 584.0  
 1870.83 0.00 -0.07 590.0 1870.83 0.00 -0.07 595.0 1870.71 0.00 -0.18 597.1  
 1870.73 0.00 -0.27 600.1 1871.10 0.00 0.00 603.0 1871.10 0.00 0.00 606.0  
 1871.20 0.00 0.00 609.0 1871.20 0.00 0.00 611.0 1871.20 0.00 0.00 613.0  
 1871.20 0.00 0.00 618.0 1871.20 0.00 0.00 622.0 1871.20 0.00 0.00 624.0  
 1871.10 0.00 0.00 627.0 1871.10 0.00 0.00 630.0 1871.10 0.00 0.00 632.0  
 1870.72 0.00 -0.28 640.9 1871.10 0.00 0.00 644.0 1870.72 0.00 -0.28 649.9  
 1870.71 0.00 -0.19 659.9 1870.62 0.00 -0.18 670.0 1870.36 0.00 -0.34 672.9  
 1870.35 0.00 -0.25 677.9 1870.35 0.00 -0.15 681.0 1870.33 0.00 -0.07 683.0  
 1870.36 0.00 0.05 684.9 1870.15 0.00 0.05 689.0 1870.11 0.00 0.04 704.3  
 1870.06 0.00 0.03 719.7 1869.99 0.00 -0.01 735.0 1870.30 0.00 0.10 740.0  
 1870.30 0.00 0.11 746.0 1869.96 0.00 -0.13 751.0 1869.94 0.00 -0.16 764.0  
 1869.92 0.00 -0.18 770.0 1869.77 0.00 -0.22 776.0 1870.23 0.00 0.03 778.1  
 1870.98 0.00 0.48 783.1 1870.98 0.00 0.38 789.0 1870.98 0.00 0.38 793.0  
 1871.00 0.00 0.40 797.0 1871.22 0.00 0.00 800.0

ID  
 6 SECTION 500.00 TIME = 17.03 HRS WS =1870.10 WIDTH = 751.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1870.33 0.00 0.00 0.0 1869.99 0.00 0.03 15.9 1869.98 0.00 0.07 31.8  
 1869.98 0.00 0.12 47.7 1869.95 0.00 0.13 63.6 1869.95 0.00 0.17 79.5  
 1869.92 0.00 0.20 95.4 1869.88 0.00 0.20 111.3 1869.87 0.00 0.24 127.3  
 1869.86 0.00 0.27 143.2 1869.84 0.00 0.29 159.1 1869.81 0.00 0.31 175.0  
 1869.80 0.00 0.30 178.0 1869.79 0.00 0.29 182.0 1869.81 0.00 0.21 195.6  
 1869.83 0.00 0.13 209.2 1869.87 0.00 0.07 222.9 1869.96 0.00 0.06 236.4  
 1869.99 0.00 -0.01 250.0 1869.96 0.00 0.06 255.0 1869.86 0.00 0.06 264.9  
 1869.81 0.00 0.11 272.0 1869.86 0.00 0.16 278.0 1869.77 0.00 0.17 284.0  
 1869.81 0.00 0.21 287.0 1869.81 0.00 0.21 294.0 1869.81 0.00 0.21 299.0  
 1869.80 0.00 0.20 307.0 1869.73 0.00 0.23 314.0 1869.80 0.00 0.20 320.0  
 1869.80 0.00 0.20 323.0 1869.75 0.00 0.15 325.0 1869.78 0.00 0.08 328.0  
 1869.90 0.00 0.10 331.0 1869.90 0.00 0.10 334.0 1869.78 0.00 0.08 338.0  
 1869.84 0.00 0.14 340.0 1869.77 0.00 0.07 344.0 1869.90 0.00 0.10 346.0  
 1869.83 0.00 0.02 348.1 1869.98 0.00 0.08 356.0 1869.98 0.00 0.08 361.0  
 1869.82 0.00 0.02 365.9 1869.89 0.00 0.09 368.0 1869.89 0.00 0.09 373.0  
 1869.75 0.00 0.05 382.0 1869.71 0.00 0.11 388.0 1869.68 0.00 0.18 393.0  
 1869.49 0.00 0.09 409.5 1869.37 0.00 0.07 426.0 1869.37 0.00 0.07 431.0  
 1869.44 0.00 0.04 433.0 1869.64 0.00 0.14 446.0 1869.72 0.00 0.12 459.0  
 1869.72 0.00 0.12 463.0 1869.62 0.00 0.12 466.0 1869.66 0.00 0.11 482.5  
 1869.69 0.00 0.09 499.0 1869.66 0.00 0.01 515.5 1869.76 0.00 0.06 532.0  
 1869.46 0.00 -0.04 549.0 1869.54 0.00 0.04 551.0 1869.53 0.00 0.03 562.0  
 1869.53 0.00 0.03 564.0 1869.52 0.00 0.02 573.0 1869.51 0.00 0.01 582.0  
 1869.44 0.00 -0.16 590.1 1869.71 0.00 -0.09 598.1 1869.90 0.00 0.00 601.0  
 1869.90 0.00 -0.10 608.1 1869.99 0.00 -0.11 612.0 1869.85 0.00 -0.25 616.1  
 1870.20 0.00 0.00 620.0 1870.20 0.00 0.00 625.0 1870.20 0.00 0.00 630.0  
 1870.20 0.00 0.00 638.0 1869.85 0.00 -0.25 642.9 1869.99 0.00 -0.11 648.0  
 1869.89 0.00 -0.11 652.9 1869.97 0.00 -0.03 657.0 1869.59 0.00 -0.21 669.9  
 1869.69 0.00 -0.06 682.0 1869.60 0.00 -0.10 694.0 1869.54 0.00 -0.17 696.0  
 1869.77 0.00 -0.03 699.0 1869.77 0.00 -0.03 704.0 1869.77 0.00 -0.03 708.0  
 1869.52 0.00 -0.18 713.0 1869.65 0.00 -0.05 715.0 1869.42 0.00 -0.18 717.0  
 1869.33 0.00 -0.17 724.0 1868.84 0.00 -0.56 728.0 1868.43 0.01 -0.77 735.0  
 1867.99 0.01 -1.11 739.0 1867.77 0.01 -1.23 742.0 1867.55 0.01 -1.35 745.0  
 1867.27 0.01 -1.53 748.0 1867.17 0.01 -1.53 751.0 1867.00 0.01 -1.60 766.0  
 1866.98 0.01 -1.62 770.0 1866.98 0.01 -1.62 772.0 1867.07 0.01 -1.63 774.0  
 1868.75 0.01 0.05 777.0 1869.57 0.00 0.87 779.0 1870.33 0.00 0.00 784.0

ID  
 5 SECTION 400.00 TIME = 17.03 HRS WS =1869.00 WIDTH = 766.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1869.24	0.00	0.00	0.0	1868.76	0.01	0.16	12.9	1868.74	0.01	0.24	25.9
1868.74	0.01	0.34	36.0	1868.74	0.01	0.33	38.1	1868.74	0.01	0.09	51.1
1868.74	0.01	-0.16	64.1	1868.91	0.00	-0.09	66.0	1868.76	0.01	-0.24	68.1
1869.20	0.00	0.00	71.0	1869.20	0.00	0.00	73.0	1869.20	0.00	0.00	76.0
1869.30	0.00	0.00	80.0	1869.05	0.00	0.00	90.0	1868.57	0.01	-0.23	99.7
1868.74	0.01	0.04	102.0	1868.74	0.01	0.24	106.9	1868.75	0.01	0.45	109.0
1868.64	0.01	0.54	114.0	1868.72	0.01	0.53	129.8	1868.75	0.01	0.47	145.5
1868.74	0.01	0.38	161.3	1868.75	0.01	0.30	177.1	1868.74	0.01	0.20	192.8
1868.74	0.01	0.12	208.5	1868.74	0.01	0.03	224.3	1868.74	0.01	-0.06	240.0
1868.74	0.01	-0.06	244.0	1868.74	0.01	-0.06	248.0	1868.75	0.01	0.05	257.0
1868.74	0.01	-0.06	263.0	1868.75	0.01	-0.05	267.0	1868.75	0.01	-0.05	271.0
1868.74	0.01	-0.06	282.0	1868.74	0.01	-0.06	286.0	1868.74	0.01	0.04	289.0
1868.75	0.01	0.05	292.0	1868.74	0.01	0.05	295.0	1868.74	0.01	0.14	299.0
1868.74	0.01	0.14	303.0	1868.74	0.01	0.24	309.9	1868.73	0.01	0.23	317.1
1868.73	0.01	0.13	319.0	1868.73	0.01	0.13	322.0	1868.74	0.01	0.14	326.0
1868.74	0.01	0.04	332.0	1868.74	0.01	0.04	335.0	1868.73	0.01	-0.07	338.0
1868.74	0.01	-0.06	340.1	1868.74	0.01	-0.16	345.0	1868.74	0.01	-0.06	348.9
1868.74	0.01	-0.06	352.0	1868.73	0.01	-0.06	356.0	1868.73	0.01	0.03	358.0
1868.73	0.01	0.03	363.0	1868.73	0.01	0.13	372.0	1868.74	0.01	0.14	377.0
1868.74	0.01	0.04	380.0	1868.74	0.01	0.04	384.0	1868.74	0.01	0.04	389.0
1868.73	0.01	0.13	397.0	1868.74	0.01	0.14	409.0	1868.74	0.01	0.04	412.0
1868.74	0.01	0.04	417.0	1868.74	0.01	0.04	430.0	1868.74	0.01	0.14	437.0
1868.74	0.01	0.14	443.0	1868.68	0.01	0.18	447.9	1868.69	0.01	0.29	454.0
1868.60	0.01	0.30	461.0	1868.60	0.01	0.30	468.0	1868.54	0.01	0.27	484.7
1868.45	0.01	0.21	501.3	1868.34	0.01	0.14	518.0	1868.23	0.01	0.06	534.7
1868.09	0.01	-0.04	551.3	1867.95	0.01	-0.16	568.0	1868.35	0.01	0.05	573.0
1868.49	0.01	-0.01	582.1	1868.73	0.01	0.13	587.0	1868.73	0.01	0.03	590.0
1868.73	0.01	-0.07	594.1	1868.73	0.01	-0.17	597.0	1868.73	0.01	-0.17	600.0
1868.73	0.01	-0.17	609.0	1868.72	0.01	-0.18	618.0	1868.73	0.01	-0.07	619.9
1868.73	0.01	-0.07	626.0	1868.73	0.01	0.08	635.5	1868.34	0.01	-0.16	644.9
1868.41	0.01	-0.09	654.0	1868.40	0.01	-0.10	658.0	1868.33	0.01	-0.17	661.1
1868.73	0.01	0.13	663.0	1868.73	0.01	0.03	665.0	1868.72	0.01	0.02	667.0
1868.73	0.01	-0.07	671.0	1868.73	0.01	-0.07	673.0	1868.73	0.01	-0.07	678.0
1868.73	0.01	-0.07	682.0	1868.73	0.01	-0.07	685.0	1868.73	0.01	-0.07	690.0
1868.72	0.01	0.02	698.0	1868.73	0.01	0.13	705.0	1867.73	0.01	-0.67	717.9
1867.32	0.01	-0.88	730.0	1867.08	0.01	-1.08	744.0	1866.67	0.01	-1.45	758.0
1868.09	0.01	0.01	772.0	1868.68	0.01	0.64	786.0	1869.24	0.00	0.00	800.0

ID  
4 SECTION 300.00 TIME = 17.03 HRS WS =1867.80 WIDTH = 485.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1868.50	0.00	0.00	0.0	1868.40	0.00	0.00	4.0	1868.40	0.00	0.00	9.0
1868.40	0.00	0.00	11.0	1868.40	0.00	0.00	16.0	1868.40	0.00	0.00	21.0
1868.40	0.00	0.00	22.0	1868.40	0.00	0.00	24.0	1868.40	0.00	0.00	26.0
1868.40	0.00	0.00	34.0	1868.40	0.00	0.00	38.0	1868.40	0.00	0.00	41.0
1868.40	0.00	0.00	42.0	1868.40	0.00	0.00	44.0	1868.40	0.00	0.00	47.0
1868.40	0.00	0.00	50.0	1868.30	0.00	0.00	54.0	1868.30	0.00	0.00	56.0
1868.30	0.00	0.00	60.0	1868.20	0.00	0.00	64.0	1868.20	0.00	0.00	73.0
1868.10	0.00	0.00	85.0	1868.00	0.00	0.00	93.0	1868.00	0.00	0.00	96.0
1868.00	0.00	0.00	111.5	1868.00	0.00	0.00	127.1	1868.00	0.00	0.00	142.6
1868.00	0.00	0.00	158.2	1868.00	0.00	0.00	173.7	1868.00	0.00	0.00	189.3
1868.00	0.00	0.00	204.8	1868.00	0.00	0.00	220.4	1868.00	0.00	0.00	235.9
1868.00	0.00	0.00	251.5	1868.00	0.00	0.00	267.0	1867.57	0.00	-0.23	280.2
1867.56	0.00	-0.04	294.0	1867.57	0.00	-0.13	298.0	1867.57	0.00	-0.13	300.0
1867.56	0.00	-0.14	314.0	1867.56	0.00	-0.14	328.0	1867.56	0.00	-0.15	332.0
1867.56	0.00	-0.14	336.0	1867.56	0.00	-0.14	340.0	1867.56	0.00	-0.14	343.0
1867.56	0.00	-0.14	345.0	1867.56	0.00	-0.14	346.0	1867.56	0.00	-0.14	349.0

1867.56 0.00 -0.14 351.0 1867.56 0.00 -0.04 354.0 1867.56 0.00 -0.04 357.0  
 1867.56 0.00 -0.04 358.0 1867.56 0.00 -0.04 359.0 1867.56 0.00 -0.04 364.0  
 1867.56 0.00 -0.04 365.0 1867.56 0.00 0.05 369.0 1867.55 0.00 0.05 372.0  
 1867.55 0.00 0.05 375.0 1867.55 0.00 0.05 378.0 1867.55 0.00 0.05 379.0  
 1867.55 0.00 0.05 387.0 1867.55 0.00 0.05 389.0 1867.55 0.00 0.05 393.0  
 1867.55 0.00 0.05 394.0 1867.55 0.00 0.05 399.0 1867.55 0.00 0.05 400.0  
 1867.55 0.00 0.05 402.0 1867.55 0.00 0.15 403.0 1867.55 0.00 0.15 413.0  
 1867.56 0.00 0.06 417.0 1867.56 0.00 0.06 419.0 1867.55 0.00 0.05 427.0  
 1867.55 0.00 -0.04 429.0 1867.55 0.00 -0.05 433.0 1867.55 0.00 -0.05 434.0  
 1867.55 0.00 -0.15 438.0 1867.55 0.00 -0.15 443.0 1867.55 0.00 -0.15 444.0  
 1867.55 0.00 -0.05 445.0 1867.55 0.00 -0.15 459.0 1867.56 0.00 -0.24 473.1  
 1867.33 0.00 -0.57 487.4 1868.00 0.00 0.00 501.0 1867.93 0.00 0.00 514.8  
 1867.25 -0.01 -0.60 528.0 1867.56 0.00 -0.21 542.2 1867.56 0.00 -0.14 556.0  
 1867.55 0.00 -0.15 559.0 1867.56 0.00 -0.19 569.5 1867.55 0.00 -0.25 580.0  
 1867.55 0.00 -0.25 587.1 1867.56 0.00 -0.34 588.0 1867.23 -0.01 -0.66 595.4  
 1868.00 0.00 0.00 598.0 1868.00 0.00 0.00 601.0 1868.00 0.00 0.00 614.0  
 1868.00 0.00 0.00 615.0 1867.21 -0.01 -0.69 617.6 1867.56 0.00 -0.24 620.9  
 1867.54 0.00 -0.16 622.0 1867.49 0.00 -0.11 624.0 1867.49 0.00 -0.11 625.0  
 1867.29 -0.01 -0.21 627.0 1866.90 -0.01 -0.49 629.0 1866.90 -0.01 -0.50 630.0  
 1866.37 -0.02 -0.93 632.0 1866.33 -0.02 -0.97 636.0 1866.23 -0.02 -1.07 646.0  
 1866.20 -0.02 -1.10 648.0 1866.14 -0.02 -1.16 654.0 1866.13 -0.02 -1.17 655.0  
 1866.08 -0.02 -1.22 659.0 1866.05 -0.02 -1.25 662.0 1866.04 -0.02 -1.26 663.0  
 1865.35 -0.03 -1.85 665.0 1864.54 -0.03 -2.56 680.0 1864.51 -0.03 -2.59 682.0  
 1864.51 -0.03 -2.59 684.0 1865.00 -0.04 -2.20 687.0 1867.16 -0.01 -0.44 695.0  
 1867.17 -0.01 -0.43 696.0 1867.18 -0.01 -0.42 699.0 1867.11 -0.01 -0.49 700.0  
 1867.43 -0.01 -0.27 701.0 1867.44 0.00 -0.26 703.0 1867.44 0.00 -0.26 704.0  
 1867.43 -0.01 -0.27 705.0 1867.44 0.00 -0.26 706.0 1867.13 -0.01 -0.46 707.0  
 1867.22 -0.01 -0.38 708.0 1867.23 -0.01 -0.37 709.0 1867.24 -0.01 -0.36 711.0  
 1866.93 -0.01 -0.57 713.0 1866.96 -0.01 -0.54 716.0 1866.98 -0.01 -0.52 719.0  
 1867.04 -0.01 -0.41 735.5 1867.00 -0.01 -0.40 752.0 1866.89 -0.01 -0.46 768.5  
 1866.80 -0.01 -0.50 785.0 1866.81 -0.01 -0.49 786.0 1867.20 -0.01 -0.19 789.0  
 1866.84 -0.01 -0.46 790.0 1866.85 -0.01 -0.45 791.0 1867.23 -0.01 -0.17 795.0  
 1867.24 -0.01 -0.16 796.0 1867.45 0.00 0.05 797.0 1867.90 0.00 0.50 797.8  
 1868.11 0.00 0.00 800.0

**ID**  
 3 SECTION 200.00 TIME = 17.03 HRS WS =1866.70 WIDTH = 397.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1868.00 0.00 0.00 0.0 1867.92 0.00 0.00 15.7 1867.84 0.00 0.00 31.3  
 1867.77 0.00 0.00 47.0 1867.69 0.00 0.00 62.7 1867.61 0.00 0.00 78.3  
 1867.53 0.00 0.00 94.0 1867.46 0.00 0.00 109.7 1867.38 0.00 0.00 125.3  
 1867.30 0.00 0.00 141.0 1867.30 0.00 0.00 147.0 1867.20 0.00 0.00 151.0  
 1867.20 0.00 0.00 153.0 1867.30 0.00 0.00 167.0 1867.20 0.00 0.00 169.0  
 1867.20 0.00 0.00 174.0 1867.10 0.00 0.00 180.0 1867.20 0.00 0.00 183.0  
 1867.20 0.00 0.00 185.0 1867.20 0.00 0.00 187.0 1867.30 0.00 0.00 199.0  
 1867.30 0.00 0.00 207.0 1867.30 0.00 0.00 211.0 1867.30 0.00 0.00 215.0  
 1867.30 0.00 0.00 226.0 1867.20 0.00 0.00 229.0 1867.20 0.00 0.00 237.0  
 1867.20 0.00 0.00 240.0 1867.30 0.00 0.00 242.0 1867.30 0.00 0.00 246.0  
 1867.10 0.00 0.00 256.0 1866.90 0.00 0.00 266.0 1866.80 0.00 0.00 269.0  
 1866.80 0.00 0.00 273.0 1866.32 -0.01 -0.13 289.1 1866.32 0.00 0.22 305.9  
 1866.32 0.00 0.32 315.0 1866.32 0.00 0.17 324.5 1866.32 0.00 0.02 334.0  
 1866.32 0.00 0.02 338.0 1866.32 0.00 -0.08 345.0 1866.32 0.00 -0.08 354.0  
 1866.32 0.00 -0.08 357.0 1866.32 0.00 -0.08 361.0 1866.32 0.00 -0.08 367.0  
 1866.32 0.00 -0.08 372.0 1866.32 0.00 -0.08 376.0 1866.32 0.00 -0.08 379.1  
 1866.32 0.00 -0.18 388.7 1866.32 0.00 -0.28 398.0 1866.32 0.00 -0.28 400.0  
 1866.31 -0.01 -0.39 410.0 1866.09 -0.01 -0.61 419.6 1866.80 0.00 0.00 424.0  
 1866.80 0.00 0.00 428.0 1866.90 0.00 0.00 433.0 1866.80 0.00 0.00 441.0  
 1866.80 0.00 0.00 448.0 1866.90 0.00 0.00 451.0 1866.90 0.00 0.00 455.0  
 1866.90 0.00 0.00 459.0 1867.00 0.00 0.00 463.0 1867.00 0.00 0.00 469.0  
 1866.90 0.00 0.00 472.0 1866.90 0.00 0.00 474.0 1866.80 0.00 0.00 476.0

1866.80	0.00	0.00	480.0	1866.90	0.00	0.00	484.0	1866.90	0.00	0.00	487.0
1866.90	0.00	0.00	492.0	1867.00	0.00	0.00	495.0	1867.00	0.00	0.00	497.0
1867.00	0.00	0.00	502.0	1867.00	0.00	0.00	510.0	1867.00	0.00	0.00	519.0
1866.90	0.00	0.00	521.0	1866.90	0.00	0.00	523.0	1866.80	0.00	0.00	527.0
1866.80	0.00	0.00	531.0	1866.80	0.00	0.00	534.0	1866.80	0.00	0.00	540.0
1866.00	-0.01	-0.70	544.4	1866.30	0.00	-0.35	555.0	1866.30	0.00	-0.30	565.0
1866.29	0.00	-0.31	573.0	1866.29	0.00	-0.41	579.0	1866.28	0.00	-0.42	582.0
1865.97	-0.01	-0.73	586.6	1866.80	0.00	0.00	588.0	1865.95	-0.01	-0.75	597.4
1866.27	0.00	-0.33	606.0	1866.29	0.00	-0.31	609.0	1866.29	0.00	-0.24	625.5
1866.28	0.00	-0.18	642.4	1866.26	0.00	-0.13	659.0	1866.25	0.00	-0.07	675.8
1866.25	0.00	0.00	692.5	1866.23	0.00	0.05	709.2	1865.99	0.00	-0.12	725.9
1865.27	0.01	-0.77	742.6	1864.19	0.01	-1.78	759.3	1863.75	0.01	-2.15	776.0
1863.68	0.01	-2.22	781.0	1863.52	0.01	-2.28	785.0	1865.95	0.00	0.15	790.0
1866.70	0.00	0.80	793.0	1867.29	0.00	0.00	797.0				

ID  
2 SECTION 100.00 TIME = 17.03 HRS WS = 1865.30 WIDTH = 253.8

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1867.70	0.00	0.00	0.0	1867.70	0.00	0.00	4.0	1867.70	0.00	0.00	6.0
1867.77	0.00	0.00	22.5	1867.85	0.00	0.00	39.0	1867.92	0.00	0.00	55.5
1868.00	0.00	0.00	72.0	1867.74	0.00	0.00	88.6	1867.48	0.00	0.00	105.2
1867.22	0.00	0.00	121.8	1866.96	0.00	0.00	138.4	1866.70	0.00	0.00	155.0
1866.70	0.00	0.00	160.0	1866.70	0.00	0.00	165.0	1866.60	0.00	0.00	179.0
1866.40	0.00	0.00	193.0	1866.30	0.00	0.00	204.5	1866.20	0.00	0.00	216.0
1866.15	0.00	0.00	230.8	1866.10	0.00	0.00	245.5	1866.05	0.00	0.00	260.2
1866.00	0.00	0.00	275.0	1865.80	0.00	0.00	285.5	1863.71	0.00	-1.89	293.9
1864.72	-0.01	-0.98	301.3	1864.66	-0.01	-1.14	303.1	1864.20	0.00	-1.70	304.8
1865.80	-0.03	-0.20	307.0	1865.90	0.00	0.00	309.0	1865.91	0.00	0.00	324.6
1865.92	0.00	0.00	340.2	1865.94	0.00	0.00	355.9	1865.95	0.00	0.00	371.5
1865.96	0.00	0.00	387.1	1865.97	0.00	0.00	402.8	1865.99	0.00	0.00	418.4
1866.00	0.00	0.00	434.0	1866.00	0.00	0.00	435.0	1866.00	0.00	0.00	439.0
1866.00	0.00	0.00	441.0	1866.00	0.00	0.00	442.0	1866.00	0.00	0.00	458.0
1866.00	0.00	0.00	474.0	1866.00	0.00	0.00	490.0	1866.00	0.00	0.00	506.0
1866.00	0.00	0.00	522.0	1865.90	0.00	0.00	528.0	1865.90	0.00	0.00	533.0
1865.90	0.00	0.00	534.0	1865.90	0.00	0.00	537.0	1865.80	0.00	0.00	539.0
1865.80	0.00	0.00	540.0	1865.80	0.00	0.00	541.0	1863.13	0.00	-2.47	549.7
1864.61	-0.01	-0.89	555.9	1864.64	-0.01	-0.76	557.8	1864.63	-0.01	-0.77	561.0
1864.63	-0.01	-0.67	563.8	1864.62	-0.01	-0.58	566.8	1864.62	-0.01	-0.58	569.0
1864.61	-0.01	-0.59	573.0	1864.61	-0.01	-0.49	573.8	1864.61	-0.01	-0.49	576.0
1864.60	-0.01	-0.50	578.0	1864.60	-0.01	-0.40	579.9	1864.61	-0.01	-0.39	582.0
1864.61	-0.01	-0.40	583.0	1864.61	-0.01	-0.39	586.4	1864.59	-0.01	-0.61	592.0
1864.59	-0.01	-0.61	593.0	1864.58	-0.01	-0.62	596.0	1864.58	-0.01	-0.62	597.0
1864.58	-0.01	-0.62	598.0	1864.58	-0.01	-0.62	599.0	1864.58	-0.01	-0.42	600.6
1864.59	-0.01	-0.41	603.1	1864.57	-0.01	-0.53	604.0	1864.59	-0.01	-0.51	605.0
1864.57	-0.01	-0.53	606.2	1864.57	-0.01	-0.63	608.0	1864.58	-0.01	-0.62	610.0
1864.58	-0.01	-0.62	611.0	1864.57	-0.01	-0.63	612.0	1864.57	-0.01	-0.43	617.6
1864.57	-0.01	-0.43	620.0	1864.57	-0.01	-0.43	621.0	1864.57	-0.01	-0.33	622.9
1864.57	-0.01	-0.33	624.1	1864.55	-0.01	-0.45	626.0	1864.57	-0.01	-0.43	627.0
1864.56	-0.01	-0.44	628.0	1864.56	-0.01	-0.44	629.0	1864.56	-0.01	-0.44	632.0
1864.54	-0.01	-0.36	633.9	1864.56	-0.01	-0.34	635.0	1864.56	-0.01	-0.34	636.1
1864.55	-0.01	-0.46	645.1	1864.54	-0.01	-0.56	646.0	1864.52	-0.01	-0.58	647.6
1864.52	-0.01	-0.88	660.8	1862.78	0.00	-2.92	675.8	1866.00	0.00	0.00	687.0
1865.80	0.00	0.00	697.0	1862.55	0.00	-3.05	704.7	1864.49	-0.01	-1.11	709.0
1864.51	-0.01	-0.99	709.9	1864.50	-0.01	-1.00	713.0	1864.50	-0.01	-1.00	714.0
1864.47	-0.01	-0.83	725.6	1864.47	-0.01	-0.83	727.0	1864.46	-0.01	-0.84	729.0
1864.46	-0.01	-0.74	730.8	1864.48	-0.01	-0.72	732.0	1864.46	-0.01	-0.74	733.0
1864.48	-0.01	-0.62	734.8	1864.48	-0.01	-0.52	737.9	1864.45	-0.01	-0.45	741.9
1864.46	-0.01	-0.14	748.9	1864.38	-0.01	0.08	758.0	1864.29	-0.01	0.09	761.0
1864.02	0.02	0.02	772.0	1864.30	0.02	0.20	774.0	1864.35	0.02	0.25	776.0
1864.37	0.02	0.27	777.0	1864.74	0.01	0.54	782.0	1864.80	0.01	0.60	787.0

1864.82 0.01 0.52 790.5 1865.65 0.00 1.35 792.0 1867.29 0.00 0.00 800.0

ID  
 1 SECTION 1.00 TIME = 17.03 HRS WS = 1864.80 WIDTH = 420.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1866.90	0.00	0.00	0.0	1866.80	0.00	0.00	10.5	1866.70	0.00	0.00	21.0
1866.60	0.00	0.00	27.0	1866.50	0.00	0.00	37.0	1866.25	0.00	0.00	52.0
1866.00	0.00	0.00	67.0	1866.20	0.00	0.00	77.0	1866.10	0.00	0.00	80.0
1866.10	0.00	0.00	82.0	1866.10	0.00	0.00	83.0	1866.20	0.00	0.00	88.0
1866.13	0.00	0.00	102.0	1866.07	0.00	0.00	116.0	1866.00	0.00	0.00	130.0
1866.15	0.00	0.00	143.0	1866.30	0.00	0.00	156.0	1866.15	0.00	0.00	172.0
1866.00	0.00	0.00	188.0	1866.00	0.00	0.00	204.0	1866.00	0.00	0.00	220.0
1866.10	0.00	0.00	222.0	1866.10	0.00	0.00	225.0	1866.10	0.00	0.00	226.0
1866.10	0.00	0.00	232.0	1866.10	0.00	0.00	234.0	1866.00	0.00	0.00	250.0
1866.00	0.00	0.00	254.0	1866.00	0.00	0.00	255.0	1866.00	0.00	0.00	258.0
1865.90	0.00	0.00	263.0	1865.90	0.00	0.00	266.0	1865.90	0.00	0.00	267.0
1865.80	0.00	0.00	269.0	1865.80	0.00	0.00	270.0	1865.80	0.00	0.00	271.0
1865.80	0.00	0.00	272.0	1865.80	0.00	0.00	273.0	1865.80	0.00	0.00	274.0
1865.70	0.00	0.00	278.0	1865.60	0.00	0.00	283.0	1865.50	0.00	0.00	286.0
1865.20	0.00	0.00	297.5	1864.90	0.00	0.00	309.0	1864.80	0.00	0.00	314.0
1864.80	0.00	0.23	326.1	1864.61	0.00	0.28	337.8	1864.60	0.00	0.50	350.0
1864.60	0.00	0.60	351.1	1864.60	0.00	0.59	367.0	1864.36	0.00	0.36	383.3
1864.80	0.00	0.00	385.0	1865.10	0.00	0.00	387.0	1865.80	0.00	0.00	391.0
1865.90	0.00	0.00	393.0	1866.00	0.00	0.00	395.0	1865.60	0.00	0.00	397.0
1865.30	0.00	0.00	398.0	1865.30	0.00	0.00	399.0	1865.40	0.00	0.00	400.0
1865.50	0.00	0.00	403.0	1865.60	0.00	0.00	405.0	1865.60	0.00	0.00	407.0
1865.60	0.00	0.00	408.0	1865.60	0.00	0.00	411.0	1865.60	0.00	0.00	412.0
1865.60	0.00	0.00	413.0	1865.60	0.00	0.00	414.0	1865.60	0.00	0.00	415.0
1865.60	0.00	0.00	416.0	1865.60	0.00	0.00	417.0	1865.50	0.00	0.00	419.0
1865.50	0.00	0.00	420.0	1865.40	0.00	0.00	421.0	1865.10	0.00	0.00	426.0
1865.10	0.00	0.00	427.0	1865.10	0.00	0.00	428.0	1864.72	0.00	0.07	439.0
1864.43	0.00	0.22	449.7	1864.60	0.00	0.30	455.0	1864.60	0.00	0.30	459.0
1864.60	0.00	0.30	462.0	1864.57	0.00	0.27	463.0	1864.57	0.00	0.18	465.1
1864.51	0.00	0.01	466.2	1864.70	0.00	0.10	467.0	1864.74	0.00	0.04	477.5
1864.80	0.00	0.00	488.0	1864.74	0.00	0.04	490.0	1864.74	0.00	0.04	492.0
1864.74	0.00	0.04	495.0	1864.70	0.00	0.10	498.0	1864.70	0.00	0.10	500.0
1864.70	0.00	0.10	503.0	1864.70	0.00	0.10	507.0	1864.70	0.00	0.10	511.0
1864.70	0.00	0.10	513.0	1864.70	0.00	0.10	520.0	1864.46	0.00	-0.04	523.8
1864.56	0.00	0.16	530.9	1864.55	0.00	0.25	538.0	1864.55	0.00	0.35	539.0
1864.53	0.00	0.43	544.0	1864.51	0.00	0.46	555.5	1864.51	0.00	0.51	567.0
1864.50	0.00	0.40	582.0	1864.48	0.00	0.41	598.0	1864.49	0.00	0.44	614.0
1864.46	0.00	0.44	630.0	1864.44	0.00	0.44	646.0	1864.43	0.00	0.27	660.7
1864.42	0.00	0.09	675.4	1864.53	0.00	0.03	690.0	1864.53	0.00	0.03	695.0
1864.53	0.00	0.03	696.0	1864.53	0.00	0.03	697.0	1864.52	0.00	0.02	703.0
1864.42	0.00	0.02	704.9	1864.37	0.00	-0.03	707.0	1864.37	0.00	-0.03	709.0
1864.37	0.00	-0.03	710.0	1864.37	0.00	-0.03	711.0	1864.37	0.00	-0.03	712.0
1864.37	0.00	-0.03	714.0	1864.36	0.00	-0.04	716.0	1864.36	0.00	-0.04	719.0
1864.35	0.00	0.05	722.0	1864.35	0.00	0.05	724.0	1864.35	0.00	0.15	725.0
1864.35	0.00	0.15	727.0	1864.35	0.00	0.15	729.0	1864.38	0.00	0.28	732.0
1864.32	0.00	0.22	737.0	1864.32	0.00	0.22	738.0	1864.31	0.00	0.21	741.0
1864.34	0.00	0.34	744.0	1864.33	0.00	0.33	748.0	1864.33	0.00	0.33	749.0
1862.01	-0.02	-1.89	753.3	1861.86	-0.03	-1.94	758.4	1861.72	-0.03	-2.08	763.0
1861.66	-0.03	-2.14	765.0	1861.60	-0.03	-2.20	766.0	1861.44	-0.03	-2.26	770.9
1861.21	-0.03	-2.39	777.0	1861.18	-0.03	-2.42	779.0	1860.53	-0.04	-2.97	786.0
1860.31	-0.04	-3.19	788.0	1860.09	-0.05	-3.41	791.0	1863.40	-0.01	0.00	795.0
1864.58	0.00	1.28	798.0	1865.00	0.00	0.00	800.0				

1

TIME = 30.02 HRS DT = 120 SECS TIME STEP = 1070

SECTION W.S.ELEV. WIDTH DEPTH Q V SLOPE D50 QS/Q FR SED. YIELD

FT	FT	FT	CFS	FPS	MM	1000 PPM	TONS			
1.000	1863.84	46.8	0.94	128	3.49	0.006892	0.55	1.43	0.69	0.175E+05
100.000	1864.77	57.9	1.17	128	3.78	0.012085	0.50	9.66	0.87	0.179E+05
200.000	1865.07	29.0	1.65	128	4.94	0.012092	0.57	13.35	0.92	0.177E+05
300.000	1865.47	28.6	1.61	128	5.18	0.013509	0.64	17.90	0.98	0.174E+05
400.000	1866.66	49.4	1.40	128	4.35	0.015729	0.74	16.69	0.99	0.160E+05
500.000	1867.91	70.8	0.78	128	3.34	0.010272	0.49	7.24	0.80	0.153E+05
600.000	1868.90	61.8	1.02	128	3.50	0.009997	0.57	7.71	0.80	0.152E+05
700.000	1869.92	62.6	0.92	128	3.53	0.010486	0.66	5.89	0.82	0.150E+05
800.000	1870.94	61.8	1.13	128	3.50	0.010104	0.49	6.93	0.80	0.164E+05
900.000	1871.93	62.0	1.06	128	3.49	0.009996	0.59	8.54	0.80	0.168E+05
1000.000	1872.94	41.4	1.05	128	4.09	0.009865	0.54	4.10	0.83	0.175E+05
1100.000	1874.37	78.5	1.77	128	3.56	0.014547	0.67	15.02	0.92	0.182E+05
1200.000	1875.51	76.5	1.12	128	2.98	0.007782	0.50	0.57	0.70	0.189E+05
1300.000	1876.51	69.6	0.78	128	3.54	0.012250	0.62	9.77	0.86	0.192E+05
1400.000	1877.41	65.1	0.86	128	3.36	0.009383	0.66	6.15	0.77	0.190E+05
1500.000	1878.33	44.6	1.13	128	3.73	0.008085	0.59	3.28	0.75	0.187E+05
1600.000	1879.18	38.6	1.02	128	3.90	0.007724	0.55	9.36	0.74	0.179E+05
1700.000	1879.91	36.7	1.22	128	3.70	0.006015	0.52	0.68	0.67	0.173E+05
1800.000	1880.71	46.8	0.85	128	3.92	0.010042	0.53	10.43	0.82	0.170E+05
1900.000	1881.69	43.2	0.99	128	3.81	0.008251	0.51	6.61	0.76	0.172E+05
2000.000	1882.65	57.5	0.98	128	3.68	0.010724	0.50	7.56	0.83	0.172E+05
2100.000	1883.67	51.3	0.83	128	3.94	0.011716	0.45	10.65	0.87	0.172E+05
2200.000	1884.61	49.8	0.97	128	4.09	0.012620	0.60	14.68	0.91	0.172E+05
2300.000	1885.63	60.9	1.07	128	3.54	0.010224	0.61	7.25	0.81	0.170E+05
2400.000	1886.70	66.9	1.12	128	3.53	0.011404	0.49	5.24	0.84	0.171E+05
2500.000	1887.50	47.2	0.76	128	4.16	0.012430	0.63	15.22	0.90	0.169E+05
2600.000	1888.64	63.4	0.88	128	3.33	0.008818	0.67	3.78	0.75	0.168E+05
2700.000	1889.54	55.3	0.86	128	3.75	0.010853	0.55	5.05	0.84	0.175E+05
2800.000	1890.50	73.2	1.14	128	3.81	0.016728	0.56	14.01	0.99	0.181E+05
2900.000	1891.71	69.1	1.22	128	3.48	0.011631	0.39	11.64	0.84	0.182E+05
3000.000	1892.69	89.1	1.49	128	2.96	0.009438	0.73	9.87	0.75	0.177E+05
3100.000	1893.74	95.3	1.84	128	3.28	0.014425	0.71	10.54	0.90	0.173E+05
3200.000	1894.79	87.5	1.63	128	2.79	0.007505	0.44	1.19	0.68	0.175E+05
3300.000	1895.39	79.7	0.74	128	3.29	0.011468	0.62	9.01	0.83	0.180E+05
3400.000	1896.32	70.3	1.13	128	3.03	0.007389	0.59	2.40	0.69	0.186E+05
3500.000	1897.08	84.7	0.97	128	3.08	0.009936	0.59	5.86	0.77	0.194E+05
3600.000	1897.96	70.7	1.20	128	2.99	0.007077	0.55	3.81	0.67	0.207E+05
3700.000	1898.70	59.1	1.04	128	3.00	0.005638	0.39	3.60	0.62	0.213E+05
3800.000	1899.23	46.1	1.14	128	3.25	0.005320	0.38	3.69	0.62	0.215E+05
3900.000	1899.77	47.6	1.21	128	3.17	0.005112	0.32	4.29	0.61	0.211E+05
4000.000	1900.34	92.8	1.07	128	2.25	0.003955	0.42	3.61	0.51	0.203E+05
4100.000	1900.80	69.1	0.72	128	2.98	0.006822	0.29	4.63	0.67	0.194E+05
4200.000	1904.50	200.1	0.50	128	2.53	0.016119	0.52	7.30	0.88	0.190E+05

ID  
42 SECTION 4100.00 TIME = 30.02 HRS WS = 1900.80 WIDTH = 69.1

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1917.20	0.00	0.00	0.0	1916.00	0.00	0.00	15.0	1915.80	0.00	0.00	18.0
1915.00	0.00	0.00	31.0	1914.70	0.00	0.00	38.0	1914.00	0.00	0.00	51.0
1913.55	0.00	0.00	61.0	1913.10	0.00	0.00	71.0	1912.50	0.00	0.00	83.0
1912.00	0.00	0.00	92.0	1911.70	0.00	0.00	103.0	1911.60	0.00	0.00	108.0
1911.40	0.00	0.00	114.0	1911.30	0.00	0.00	116.0	1911.00	0.00	0.00	122.0
1910.70	0.00	0.00	129.0	1910.60	0.00	0.00	136.0	1910.20	0.00	0.00	147.0
1910.20	0.00	0.00	149.0	1910.00	0.00	0.00	156.0	1909.90	0.00	0.00	160.0
1909.50	0.00	0.00	173.0	1909.30	0.00	0.00	178.0	1909.10	0.00	0.00	183.0
1908.70	0.00	0.00	194.5	1908.30	0.00	0.00	206.0	1908.20	0.00	0.00	208.0
1907.80	0.00	0.00	221.0	1907.80	0.00	0.00	223.0	1907.40	0.00	0.00	237.0
1907.20	0.00	0.00	245.0	1906.80	0.00	0.00	259.0	1906.45	0.00	0.00	272.0

1906.10	0.00	0.00	285.0	1906.00	0.00	0.00	289.0	1905.90	0.00	0.00	295.0
1905.80	0.00	0.00	301.0	1905.50	0.00	0.00	314.0	1905.30	0.00	0.00	323.0
1905.20	0.00	0.00	326.0	1905.10	0.00	0.00	333.0	1904.90	0.00	0.00	338.0
1904.80	0.00	0.00	345.0	1904.60	0.00	0.00	358.0	1904.40	0.00	0.00	365.0
1904.21	0.00	0.01	373.0	1904.21	0.00	0.01	375.0	1904.21	0.00	0.01	377.0
1904.15	0.00	0.05	382.0	1904.15	0.00	0.05	385.0	1904.21	0.00	0.01	389.0
1904.13	0.00	0.13	397.0	1904.15	0.00	0.05	405.0	1904.15	0.00	0.05	408.0
1904.21	0.00	0.01	413.0	1904.21	0.00	0.01	418.0	1904.17	0.00	0.02	427.0
1904.15	0.00	0.05	436.0	1904.15	0.00	0.05	442.0	1904.13	0.00	0.18	455.0
1904.11	0.00	0.31	468.0	1904.10	0.00	0.50	484.0	1904.10	0.00	0.50	488.0
1904.10	0.00	0.50	497.0	1904.09	0.00	0.59	500.0	1904.07	0.00	0.67	505.0
1903.82	0.00	0.62	515.0	1902.46	0.00	-0.44	529.0	1900.23	0.00	-2.36	542.0
1900.21	0.00	-2.19	548.0	1900.19	0.00	-2.21	551.0	1900.16	0.00	-2.14	557.0
1900.12	0.00	-2.13	566.0	1900.08	0.00	-2.12	575.0	1900.11	0.00	-2.19	582.0
1900.13	0.00	-2.37	585.0	1900.14	0.00	-2.36	588.0	1900.18	0.00	-2.52	596.0
1900.24	0.00	-2.66	607.0	1902.30	0.00	-0.70	610.0	1903.23	0.00	0.13	612.0
1903.65	0.00	0.45	615.0	1903.66	0.00	0.46	617.0	1903.69	0.00	0.49	621.0
1903.72	0.00	0.52	624.0	1903.52	0.00	0.42	626.0	1903.58	0.00	0.48	630.0
1903.62	0.00	0.52	634.0	1903.64	0.00	0.54	636.0	1903.68	0.00	0.58	641.0
1903.70	0.00	0.60	644.0	1903.55	0.00	0.55	648.0	1903.82	0.00	0.72	657.5
1903.91	0.00	0.71	667.0	1903.96	0.00	0.66	672.0	1904.07	0.00	0.67	676.0
1904.10	0.00	0.50	683.0	1904.10	0.00	0.40	686.0	1904.11	0.00	0.31	695.0
1904.12	0.00	0.22	706.0	1904.12	0.00	0.19	722.0	1904.13	0.00	0.16	738.0
1904.13	0.00	0.13	754.0	1904.67	0.00	0.00	767.7	1905.33	0.00	0.00	781.3
1906.00	0.00	0.00	795.0								

ID  
41 SECTION 4000.00 TIME = 30.02 HRS WS=1900.34 WIDTH = 92.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1913.70	0.00	0.00	0.0	1912.95	0.00	0.00	12.0	1912.20	0.00	0.00	24.0
1911.90	0.00	0.00	29.0	1911.40	0.00	0.00	41.0	1911.10	0.00	0.00	49.0
1910.80	0.00	0.00	56.0	1910.50	0.00	0.00	63.0	1910.00	0.00	0.00	77.0
1909.80	0.00	0.00	85.0	1909.50	0.00	0.00	94.0	1909.40	0.00	0.00	97.0
1909.30	0.00	0.00	102.0	1908.80	0.00	0.00	115.0	1908.50	0.00	0.00	125.0
1908.40	0.00	0.00	127.0	1908.30	0.00	0.00	130.0	1908.20	0.00	0.00	132.0
1908.20	0.00	0.00	137.0	1908.00	0.00	0.00	145.0	1908.00	0.00	0.00	149.0
1907.80	0.00	0.00	158.0	1907.70	0.00	0.00	161.0	1907.60	0.00	0.00	166.0
1907.30	0.00	0.00	178.0	1907.20	0.00	0.00	181.0	1907.00	0.00	0.00	190.0
1906.90	0.00	0.00	196.0	1906.80	0.00	0.00	201.0	1906.80	0.00	0.00	205.0
1906.60	0.00	0.00	213.0	1906.40	0.00	0.00	221.0	1906.30	0.00	0.00	224.0
1906.20	0.00	0.00	228.0	1906.00	0.00	0.00	237.0	1905.80	0.00	0.00	245.0
1905.70	0.00	0.00	250.0	1905.70	0.00	0.00	252.0	1905.50	0.00	0.00	262.0
1905.40	0.00	0.00	264.0	1905.20	0.00	0.00	274.0	1905.10	0.00	0.00	278.0
1905.00	0.00	0.00	284.0	1904.90	0.00	0.00	288.0	1904.80	0.00	0.00	293.0
1904.60	0.00	0.00	299.0	1904.20	0.00	0.00	313.0	1904.00	0.00	0.00	322.0
1903.80	0.00	0.00	333.0	1903.70	0.00	0.00	340.0	1903.60	0.00	0.00	348.0
1903.50	0.00	0.00	355.0	1902.92	0.00	-0.38	359.6	1902.92	0.00	-0.28	375.1
1902.92	0.00	-0.18	389.8	1902.91	0.00	-0.09	404.4	1902.91	0.00	0.01	418.8
1902.92	0.00	-0.08	421.0	1902.91	0.00	-0.09	426.0	1902.92	0.00	-0.09	430.2
1902.91	0.00	-0.19	433.0	1902.91	0.00	-0.19	436.4	1902.91	0.00	-0.29	440.0
1902.91	0.00	-0.29	443.0	1902.91	0.00	-0.29	449.0	1902.91	0.00	-0.29	454.0
1902.91	0.00	-0.09	468.3	1902.91	0.00	0.01	471.7	1902.91	0.00	0.11	473.7
1902.91	0.00	0.21	476.7	1902.91	0.00	0.31	479.8	1902.91	0.00	0.41	483.9
1902.91	0.00	0.51	487.0	1902.91	0.00	0.61	489.0	1902.91	0.00	0.81	496.0
1902.91	0.00	0.82	512.1	1902.91	0.00	0.83	528.2	1902.91	0.00	0.84	544.3
1902.91	0.00	0.85	560.4	1902.92	0.00	0.87	576.5	1902.92	0.00	0.88	592.6
1902.91	0.00	0.88	608.7	1902.91	0.00	0.89	625.0	1899.27	0.00	-2.74	633.7
1899.79	0.00	-2.21	657.0	1899.79	0.00	-2.31	660.0	1899.79	0.00	-2.46	669.6
1899.78	0.00	-2.62	679.1	1899.78	0.00	-2.82	687.7	1899.79	0.00	-3.06	701.6
1899.79	0.00	-3.31	723.0	1903.56	0.00	0.00	729.2	1904.02	0.00	0.00	743.4

1904.48 0.00 0.00 757.6 1904.94 0.00 0.00 771.8 1905.40 0.00 0.00 786.0  
 1906.10 0.00 0.00 798.0

ID  
 40 SECTION 3900.00 TIME = 30.02 HRS WS = 1899.77 WIDTH = 47.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1910.90	0.00	0.00	0.0	1910.50	0.00	0.00	8.0	1910.00	0.00	0.00	19.0
1909.80	0.00	0.00	27.0	1909.80	0.00	0.00	29.0	1909.40	0.00	0.00	39.0
1909.20	0.00	0.00	49.0	1908.70	0.00	0.00	64.0	1908.00	0.00	0.00	81.0
1907.70	0.00	0.00	92.5	1907.40	0.00	0.00	104.0	1907.10	0.00	0.00	116.0
1906.90	0.00	0.00	124.0	1906.70	0.00	0.00	130.0	1906.60	0.00	0.00	136.0
1906.30	0.00	0.00	144.0	1906.20	0.00	0.00	150.0	1906.10	0.00	0.00	153.0
1906.00	0.00	0.00	158.0	1905.70	0.00	0.00	174.0	1905.20	0.00	0.00	191.0
1905.10	0.00	0.00	197.0	1905.00	0.00	0.00	200.0	1905.00	0.00	0.00	204.0
1904.80	0.00	0.00	212.0	1904.70	0.00	0.00	216.0	1904.60	0.00	0.00	221.0
1904.50	0.00	0.00	225.0	1904.40	0.00	0.00	228.0	1904.40	0.00	0.00	230.0
1904.40	0.00	0.00	232.0	1904.40	0.00	0.00	238.0	1904.30	0.00	0.00	247.0
1904.20	0.00	0.00	252.0	1904.00	0.00	0.00	262.0	1903.80	0.00	0.00	274.0
1903.60	0.00	0.00	282.0	1903.60	0.00	0.00	292.0	1903.50	0.00	0.00	294.0
1903.40	0.00	0.00	297.0	1903.30	0.00	0.00	303.0	1903.10	0.00	0.00	313.0
1903.00	0.00	0.00	318.0	1902.90	0.00	0.00	323.0	1902.80	0.00	0.00	330.0
1902.70	0.00	0.00	333.0	1902.60	0.00	0.00	343.0	1902.04	0.00	-0.36	353.9
1902.03	0.00	-0.27	363.0	1902.03	0.00	0.03	378.9	1902.03	0.00	0.07	392.8
1902.03	0.00	0.10	406.3	1902.03	0.00	0.13	420.0	1902.04	0.00	0.04	426.0
1902.03	0.00	0.03	430.2	1902.03	0.00	-0.07	434.0	1902.03	0.00	-0.07	440.0
1902.03	0.00	-0.07	451.0	1902.03	0.00	-0.07	461.0	1902.03	0.00	0.08	474.8
1902.03	0.00	0.23	489.0	1902.03	0.00	0.43	497.0	1902.03	0.00	0.63	502.1
1902.03	0.00	0.73	508.1	1902.03	0.00	0.83	512.0	1902.03	0.00	0.69	528.4
1902.03	0.00	0.55	544.8	1902.03	0.00	0.41	561.3	1902.03	0.00	0.27	577.8
1902.03	0.00	0.13	594.0	1902.03	0.00	0.03	601.0	1898.56	0.00	-2.99	610.4
1898.56	0.00	-2.55	631.0	1898.56	0.00	-2.55	635.0	1899.09	0.00	-1.81	638.0
1899.53	0.00	-1.63	649.5	1900.15	0.00	-1.25	662.9	1900.16	0.00	-1.74	677.3
1900.18	0.00	-1.75	690.1	1900.36	0.00	-1.59	705.7	1901.72	0.00	-0.26	716.6
1901.72	0.00	-0.28	731.7	1902.70	0.00	0.00	735.0	1904.00	0.00	0.00	741.0
1905.00	0.00	0.00	755.0	1906.00	0.00	0.00	769.0	1905.80	0.00	0.00	772.0
1905.00	0.00	0.00	783.0	1904.40	0.00	0.00	792.0	1904.00	0.00	0.00	798.0

ID  
 39 SECTION 3800.00 TIME = 30.02 HRS WS = 1899.23 WIDTH = 46.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1909.60	0.00	0.00	0.0	1909.10	0.00	0.00	13.0	1908.70	0.00	0.00	24.0
1908.10	0.00	0.00	38.0	1907.90	0.00	0.00	46.0	1907.80	0.00	0.00	48.0
1907.80	0.00	0.00	50.0	1907.45	0.00	0.00	61.0	1907.10	0.00	0.00	72.0
1907.00	0.00	0.00	77.0	1906.80	0.00	0.00	82.0	1906.70	0.00	0.00	88.0
1906.70	0.00	0.00	92.0	1906.40	0.00	0.00	101.0	1906.00	0.00	0.00	114.0
1905.60	0.00	0.00	130.0	1905.30	0.00	0.00	142.0	1905.30	0.00	0.00	146.0
1905.10	0.00	0.00	152.0	1904.90	0.00	0.00	160.0	1904.80	0.00	0.00	165.0
1904.70	0.00	0.00	170.0	1904.70	0.00	0.00	175.0	1904.60	0.00	0.00	183.0
1904.40	0.00	0.00	188.0	1904.00	0.00	0.00	205.0	1903.80	0.00	0.00	218.0
1903.70	0.00	0.00	227.0	1903.50	0.00	0.00	238.0	1903.30	0.00	0.00	247.0
1903.20	0.00	0.00	256.0	1903.10	0.00	0.00	260.0	1903.00	0.00	0.00	264.0
1903.00	0.00	0.00	269.0	1902.90	0.00	0.00	273.0	1902.70	0.00	0.00	287.0
1902.40	0.00	0.00	299.0	1902.20	0.00	0.00	313.0	1902.00	0.00	0.00	321.0
1901.90	0.00	0.00	325.0	1901.80	0.00	0.00	335.0	1901.38	0.00	-0.22	343.6
1901.27	0.00	-0.33	348.1	1901.21	0.00	-0.29	350.6	1901.21	0.00	-0.14	360.2
1901.21	0.00	0.01	370.0	1901.20	0.00	0.00	374.1	1901.21	0.00	0.11	377.1
1901.20	0.00	0.10	379.0	1901.20	0.00	0.20	380.9	1901.21	0.00	0.21	384.0
1901.20	0.00	0.30	386.9	1901.20	0.00	0.30	389.0	1901.20	0.00	0.41	393.0

1901.20 0.00 0.40 395.0 1901.20 0.00 0.40 398.0 1901.20 0.00 0.40 400.0  
 1901.20 0.00 0.40 416.0 1901.19 0.00 0.39 419.0 1901.19 0.00 0.39 423.0  
 1901.18 0.00 0.38 427.0 1901.19 0.00 0.39 433.0 1901.20 0.00 0.30 435.1  
 1901.20 0.00 0.20 439.0 1901.20 0.00 0.20 444.2 1901.19 0.00 0.10 446.0  
 1901.20 0.00 0.10 448.0 1901.18 0.00 0.08 465.0 1901.19 0.00 0.19 467.8  
 1901.18 0.00 0.18 478.5 1901.17 0.00 0.17 489.0 1901.19 0.00 0.19 492.0  
 1901.17 0.00 0.17 496.0 1901.18 0.00 0.27 502.8 1901.14 0.00 0.24 506.0  
 1901.16 0.00 0.35 509.9 1901.18 0.00 0.48 513.9 1901.14 0.00 0.64 522.9  
 1898.12 0.00 -2.18 532.7 1898.10 0.00 -2.10 536.9 1898.18 0.00 -1.82 547.0  
 1898.31 0.00 -1.73 563.6 1899.51 0.00 -0.57 578.8 1899.52 0.00 -0.61 596.8  
 1899.52 0.00 -0.65 613.4 1899.61 0.00 -0.60 631.0 1900.85 0.00 0.60 646.4  
 1900.86 0.00 0.55 663.0 1900.89 0.00 0.29 672.8 1900.95 0.00 0.04 680.3  
 1900.96 0.00 -0.49 690.7 1902.00 0.00 0.00 699.0 1902.67 0.00 0.00 715.7  
 1903.33 0.00 0.00 732.3 1904.00 0.00 0.00 749.0

ID  
 38 SECTION 3700.00 TIME = 30.02 HRS WS = 1898.70 WIDTH = 59.1

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1908.30 0.00 0.00 0.0 1908.00 0.00 0.00 8.0 1907.90 0.00 0.00 0.00 13.0  
 1907.80 0.00 0.00 17.0 1907.50 0.00 0.00 26.0 1907.40 0.00 0.00 0.00 30.0  
 1907.10 0.00 0.00 37.0 1906.80 0.00 0.00 47.0 1906.30 0.00 0.00 0.00 61.0  
 1906.00 0.00 0.00 69.0 1905.60 0.00 0.00 82.0 1905.40 0.00 0.00 0.00 86.0  
 1905.30 0.00 0.00 93.0 1905.00 0.00 0.00 103.0 1904.90 0.00 0.00 0.00 108.0  
 1904.60 0.00 0.00 119.0 1904.20 0.00 0.00 135.0 1904.10 0.00 0.00 0.00 137.0  
 1904.00 0.00 0.00 143.0 1903.90 0.00 0.00 150.0 1903.80 0.00 0.00 0.00 156.0  
 1903.70 0.00 0.00 163.0 1903.60 0.00 0.00 170.0 1903.50 0.00 0.00 0.00 173.0  
 1903.50 0.00 0.00 176.0 1903.40 0.00 0.00 180.0 1903.30 0.00 0.00 0.00 186.0  
 1903.00 0.00 0.00 199.0 1902.90 0.00 0.00 204.0 1902.80 0.00 0.00 0.00 208.0  
 1902.70 0.00 0.00 213.0 1902.60 0.00 0.00 221.0 1902.50 0.00 0.00 0.00 223.0  
 1902.40 0.00 0.00 226.0 1902.30 0.00 0.00 232.0 1902.30 0.00 0.00 0.00 234.0  
 1902.20 0.00 0.00 236.0 1902.20 0.00 0.00 243.0 1902.10 0.00 0.00 0.00 251.0  
 1902.00 0.00 0.00 262.0 1901.90 0.00 0.00 272.0 1901.70 0.00 0.00 0.00 282.0  
 1901.60 0.00 0.00 288.0 1901.30 0.00 0.00 299.0 1901.30 0.00 0.00 0.00 304.0  
 1901.20 0.00 0.00 307.0 1901.10 0.00 0.00 312.0 1901.00 0.00 0.00 0.00 320.0  
 1900.75 0.00 -0.05 329.0 1900.56 0.00 -0.14 332.7 1900.52 0.00 0.02 0.02 343.5  
 1900.52 0.00 0.12 346.7 1900.52 0.00 0.22 349.7 1900.52 0.00 0.32 0.32 361.0  
 1900.52 0.00 0.41 364.0 1900.50 0.00 0.50 372.0 1900.52 0.00 0.62 0.62 383.0  
 1900.52 0.00 0.72 387.0 1900.52 0.00 0.72 388.9 1900.50 0.00 0.70 0.70 404.0  
 1900.52 0.00 0.72 419.0 1900.52 0.00 0.62 423.1 1900.50 0.00 0.59 0.59 438.0  
 1900.52 0.00 0.59 453.0 1900.52 0.00 0.58 468.0 1900.50 0.00 0.54 0.54 483.0  
 1900.52 0.00 0.54 498.0 1900.52 0.00 0.53 513.0 1900.52 0.00 0.52 0.52 528.0  
 1900.52 0.00 0.58 543.6 1900.52 0.00 0.64 559.1 1900.52 0.00 0.70 0.70 574.8  
 1899.67 0.00 -0.09 587.5 1899.33 0.00 -0.37 605.9 1899.29 0.00 -0.41 609.2  
 1898.97 0.00 -0.63 617.8 1898.91 0.00 -0.59 619.7 1898.89 0.00 -0.31 622.0  
 1898.87 0.00 -0.43 625.0 1898.86 0.00 -0.24 632.0 1898.77 0.00 -0.33 634.9  
 1898.76 0.00 -0.24 637.0 1897.76 -0.01 -0.99 648.4 1897.66 0.01 -0.84 659.9  
 1897.75 0.01 -0.85 665.0 1897.79 0.01 -0.91 667.0 1897.82 0.01 -0.98 669.0  
 1897.91 0.01 -1.19 674.0 1897.92 -0.01 -1.38 677.0 1897.91 -0.01 -1.49 680.1  
 1897.92 -0.01 -1.58 686.0 1898.87 0.00 -1.13 699.2 1899.68 0.00 -0.42 704.1  
 1899.78 0.00 -0.91 710.9 1900.21 0.00 -0.59 712.0 1901.00 0.00 0.00 0.00 717.0  
 1901.20 0.00 0.00 720.0 1901.40 0.00 0.00 723.0 1901.40 0.00 0.00 0.00 727.0  
 1901.30 0.00 0.00 730.0 1901.10 0.00 0.00 733.0

ID  
 37 SECTION 3600.00 TIME = 30.02 HRS WS = 1897.96 WIDTH = 70.7

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1905.90 0.00 0.00 0.0 1905.80 0.00 0.00 8.0 1905.60 0.00 0.00 0.00 16.0  
 1905.50 0.00 0.00 20.0 1905.50 0.00 0.00 23.0 1905.60 0.00 0.00 0.00 27.0

1905.50	0.00	0.00	30.0	1905.30	0.00	0.00	36.0	1905.20	0.00	0.00	39.0
1905.10	0.00	0.00	45.0	1904.80	0.00	0.00	54.0	1904.60	0.00	0.00	57.0
1904.50	0.00	0.00	60.0	1904.40	0.00	0.00	67.0	1904.30	0.00	0.00	70.0
1904.00	0.00	0.00	83.0	1903.80	0.00	0.00	91.0	1903.60	0.00	0.00	99.0
1903.50	0.00	0.00	103.0	1903.40	0.00	0.00	106.0	1903.30	0.00	0.00	112.0
1903.00	0.00	0.00	121.0	1902.90	0.00	0.00	127.0	1902.80	0.00	0.00	133.0
1902.60	0.00	0.00	141.0	1902.50	0.00	0.00	144.0	1902.40	0.00	0.00	150.0
1902.20	0.00	0.00	157.0	1902.00	0.00	0.00	165.0	1901.80	0.00	0.00	178.0
1901.60	0.00	0.00	193.0	1901.40	0.00	0.00	207.0	1901.20	0.00	0.00	215.0
1901.10	0.00	0.00	220.0	1901.10	0.00	0.00	227.0	1901.10	0.00	0.00	234.0
1901.10	0.00	0.00	236.0	1901.00	0.00	0.00	239.0	1901.00	0.00	0.00	240.0
1900.90	0.00	0.00	244.0	1900.80	0.00	0.00	252.0	1900.70	0.00	0.00	255.0
1900.70	0.00	0.00	258.0	1900.60	0.00	0.00	260.0	1900.60	0.00	0.00	262.0
1900.60	0.00	0.00	266.0	1900.50	0.00	0.00	270.0	1900.50	0.00	0.00	273.0
1900.40	0.00	0.00	278.0	1900.10	0.00	0.00	293.0	1900.07	0.00	0.00	309.0
1900.03	0.00	0.00	325.0	1900.00	0.00	0.00	341.0	1899.27	0.00	-0.23	354.7
1899.26	0.00	0.06	362.8	1899.26	0.00	0.16	365.9	1899.26	0.00	0.36	368.6
1899.26	0.00	0.36	371.0	1899.26	0.00	0.46	373.0	1899.26	0.00	0.56	375.0
1899.26	0.00	0.56	379.0	1899.26	0.00	0.56	382.0	1899.26	0.00	0.66	384.0
1899.26	0.00	0.66	388.0	1899.26	0.00	0.76	390.0	1899.26	0.00	0.76	392.0
1899.26	0.00	0.76	395.0	1899.26	0.00	0.76	405.0	1899.26	0.00	0.76	407.1
1899.26	0.00	0.66	412.0	1899.26	0.00	0.66	415.0	1899.26	0.00	0.66	417.1
1899.26	0.00	0.56	420.0	1899.26	0.00	0.56	423.1	1899.26	0.00	0.46	427.0
1899.26	0.00	0.46	429.1	1899.26	0.00	0.36	432.2	1899.26	0.00	0.26	436.3
1899.26	0.00	0.16	440.0	1899.26	0.00	0.16	443.0	1899.26	0.00	0.16	445.2
1899.26	0.00	0.06	449.0	1899.26	0.00	0.06	452.0	1899.26	0.00	0.06	457.0
1899.26	0.00	0.06	469.0	1899.26	0.00	0.06	473.0	1899.26	0.00	0.06	476.1
1899.26	0.00	-0.04	479.2	1899.26	0.00	-0.14	482.0	1899.26	0.00	-0.14	488.0
1899.26	0.00	-0.14	490.0	1899.26	0.00	-0.14	496.0	1899.26	0.00	-0.14	498.0
1899.26	0.00	-0.04	500.8	1899.26	0.00	-0.04	503.0	1899.26	0.00	0.06	504.9
1899.26	0.00	0.06	508.0	1899.26	0.00	0.16	509.8	1899.26	0.00	0.16	513.0
1899.26	0.00	0.26	515.7	1899.26	0.00	0.46	520.7	1899.26	0.00	0.56	525.9
1899.26	0.00	0.56	528.0	1899.26	0.00	0.66	532.9	1899.26	0.00	0.86	541.9
1899.26	0.00	0.86	544.0	1899.26	0.00	0.96	546.9	1899.26	0.00	1.06	551.0
1899.26	0.00	1.06	553.0	1899.26	0.00	1.09	568.8	1899.26	0.00	1.11	584.6
1899.26	0.00	1.13	600.3	1899.26	0.00	1.15	616.1	1899.26	0.00	1.17	631.9
1899.26	0.00	1.19	647.7	1899.26	0.00	1.22	663.4	1899.26	0.00	1.24	679.3
1896.76	0.00	-1.24	686.1	1897.47	0.00	-0.98	711.6	1897.48	0.00	-1.42	728.3
1897.51	0.00	-1.84	751.9	1899.77	0.00	-0.03	760.0	1900.00	0.00	0.00	767.0
1900.50	0.00	0.00	772.0	1901.00	0.00	0.00	776.0	1901.20	0.00	0.00	782.0
1901.30	0.00	0.00	785.0	1901.30	0.00	0.00	788.0	1901.30	0.00	0.00	794.0
1901.30	0.00	0.00	796.0	1901.20	0.00	0.00	799.0				

ID  
 36 SECTION 3500.00 TIME = 30.02 HRS WS=1897.08 WIDTH = 84.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1904.50	0.00	0.00	0.0	1904.25	0.00	0.00	12.0	1904.00	0.00	0.00	24.0
1903.70	0.00	0.00	35.0	1903.40	0.00	0.00	46.0	1903.30	0.00	0.00	53.0
1903.20	0.00	0.00	59.0	1903.00	0.00	0.00	64.0	1902.90	0.00	0.00	71.0
1902.70	0.00	0.00	80.0	1902.60	0.00	0.00	88.0	1902.40	0.00	0.00	95.0
1902.20	0.00	0.00	106.0	1901.90	0.00	0.00	116.0	1901.80	0.00	0.00	125.0
1901.50	0.00	0.00	139.0	1901.30	0.00	0.00	152.0	1901.10	0.00	0.00	159.0
1901.10	0.00	0.00	163.0	1901.00	0.00	0.00	167.0	1900.90	0.00	0.00	172.0
1900.90	0.00	0.00	175.0	1900.80	0.00	0.00	179.0	1900.70	0.00	0.00	184.0
1900.60	0.00	0.00	187.0	1900.60	0.00	0.00	190.0	1900.60	0.00	0.00	193.0
1900.50	0.00	0.00	195.0	1900.60	0.00	0.00	198.0	1900.50	0.00	0.00	211.3
1900.40	0.00	0.00	224.7	1900.30	0.00	0.00	238.0	1900.30	0.00	0.00	244.0
1900.10	0.00	0.00	257.0	1899.90	0.00	0.00	271.0	1899.60	0.00	0.00	282.0
1899.19	0.00	-0.01	293.0	1898.99	0.00	-0.01	297.0	1898.99	0.00	-0.01	303.0
1898.91	0.00	0.01	312.0	1898.81	0.00	0.01	317.0	1898.42	0.00	-0.13	326.5

1898.42 0.00 0.12 337.0 1898.42 0.00 0.42 349.1 1898.42 0.00 0.62 358.0  
 1898.42 0.00 0.72 365.0 1898.42 0.00 0.73 368.0 1898.42 0.00 0.82 371.9  
 1898.42 0.00 0.92 375.9 1898.42 0.00 0.92 382.0 1898.42 0.00 0.92 388.0  
 1898.42 0.00 1.02 390.0 1898.42 0.00 1.12 395.0 1898.42 0.00 1.12 400.0  
 1898.42 0.00 1.02 408.0 1898.42 0.00 0.92 411.1 1898.42 0.00 0.82 415.0  
 1898.42 0.00 0.82 417.2 1898.42 0.00 0.73 424.0 1898.42 0.00 0.72 430.0  
 1898.42 0.00 0.62 438.0 1898.42 0.00 0.72 441.0 1898.42 0.00 0.72 445.0  
 1898.42 0.00 0.72 450.0 1898.42 0.00 0.62 453.0 1898.42 0.00 0.62 456.2  
 1898.42 0.00 0.52 460.1 1898.42 0.00 0.32 464.1 1898.42 0.00 0.22 469.0  
 1898.42 0.00 0.22 478.2 1898.42 0.00 0.12 481.0 1898.42 0.00 0.12 489.0  
 1898.42 0.00 0.12 493.0 1898.42 0.00 0.12 499.0 1898.42 0.00 0.22 504.8  
 1898.42 0.00 0.22 511.0 1898.42 0.00 0.22 517.0 1898.42 0.00 0.32 521.9  
 1898.42 0.00 0.42 525.0 1898.42 0.00 0.62 530.8 1897.00 0.00 -0.60 534.3  
 1896.94 0.00 -0.46 538.7 1896.94 0.00 -0.36 544.4 1896.94 0.00 -0.26 545.7  
 1896.93 0.00 -0.17 548.8 1896.93 0.00 0.13 552.5 1896.93 0.00 0.13 555.0  
 1896.93 0.00 0.23 557.0 1896.92 0.00 0.22 559.0 1896.92 0.00 0.22 576.0  
 1896.90 0.00 0.20 578.0 1896.11 -0.01 -0.59 580.0 1896.11 -0.01 -0.69 582.0  
 1896.13 -0.01 -0.67 585.0 1896.14 -0.01 -0.66 587.0 1896.15 -0.01 -0.65 591.0  
 1896.15 -0.01 -0.65 595.0 1896.16 0.00 -0.63 599.4 1896.23 0.00 -0.87 616.9  
 1898.50 0.00 1.20 622.0 1898.51 0.00 1.11 630.0 1898.51 0.00 1.02 645.1  
 1898.51 0.00 0.92 660.0 1898.51 0.00 0.91 667.0 1898.51 0.00 1.01 668.9  
 1898.51 0.00 1.08 681.3 1898.51 0.00 1.15 693.7 1898.51 0.00 1.21 706.0  
 1898.51 0.00 1.21 713.0 1898.51 0.00 1.11 719.0 1898.51 0.00 1.01 726.1  
 1898.51 0.00 0.91 732.2 1898.51 0.00 0.81 738.0 1898.51 0.00 0.81 745.0  
 1898.51 0.00 0.71 760.7 1898.51 0.00 0.61 776.2 1898.51 0.00 0.51 792.2  
 1898.73 0.00 0.23 803.5 1899.66 0.00 0.00 815.0

**ID**  
 35 SECTION 3400.00 TIME = 30.02 HRS WS=1896.32 WIDTH = 70.3

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1903.00 0.00 0.00 0.0 1902.80 0.00 0.00 5.0 1902.80 0.00 0.00 0.00 8.0  
 1902.60 0.00 0.00 17.0 1902.60 0.00 0.00 19.0 1902.40 0.00 0.00 0.00 26.0  
 1902.40 0.00 0.00 30.0 1902.20 0.00 0.00 37.0 1902.00 0.00 0.00 0.00 48.0  
 1901.80 0.00 0.00 53.0 1901.70 0.00 0.00 60.0 1901.70 0.00 0.00 0.00 64.0  
 1901.60 0.00 0.00 66.0 1901.60 0.00 0.00 68.0 1901.50 0.00 0.00 0.00 72.0  
 1901.40 0.00 0.00 78.0 1901.20 0.00 0.00 85.0 1901.20 0.00 0.00 0.00 90.0  
 1901.00 0.00 0.00 98.0 1900.70 0.00 0.00 113.0 1900.45 0.00 0.00 0.00 122.0  
 1900.20 0.00 0.00 131.0 1900.20 0.00 0.00 134.0 1900.10 0.00 0.00 0.00 136.0  
 1900.05 0.00 0.00 145.5 1900.00 0.00 0.00 155.0 1899.80 0.00 0.00 0.00 164.0  
 1899.60 0.00 0.00 173.0 1899.60 0.00 0.00 179.0 1899.50 0.00 0.00 0.00 181.0  
 1899.50 0.00 0.00 184.0 1899.40 0.00 0.00 188.0 1899.40 0.00 0.00 0.00 190.0  
 1899.30 0.00 0.00 196.0 1899.30 0.00 0.00 200.0 1899.20 0.00 0.00 0.00 205.0  
 1899.30 0.00 0.00 220.0 1899.30 0.00 0.00 222.0 1899.40 0.00 0.00 0.00 227.0  
 1899.40 0.00 0.00 229.0 1899.40 0.00 0.00 233.0 1899.40 0.00 0.00 0.00 237.0  
 1899.40 0.00 0.00 240.0 1899.50 0.00 0.00 242.0 1899.50 0.00 0.00 0.00 244.0  
 1899.50 0.00 0.00 248.0 1899.40 0.00 0.00 258.0 1899.30 0.00 0.00 0.00 261.0  
 1899.30 0.00 0.00 265.0 1899.20 0.00 0.00 268.0 1899.20 0.00 0.00 0.00 270.0  
 1899.10 0.00 0.00 274.0 1899.00 0.00 0.00 277.0 1898.90 0.00 0.00 0.00 285.0  
 1898.80 0.00 0.00 289.0 1898.45 0.00 0.00 303.8 1898.10 0.00 0.00 0.00 318.7  
 1897.75 0.00 0.00 333.5 1895.84 0.00 -1.56 345.0 1897.23 0.00 0.18 362.7  
 1897.23 0.00 0.53 377.9 1897.23 0.00 0.73 384.0 1897.23 0.00 0.83 392.0  
 1897.23 0.00 0.93 396.0 1897.23 0.00 1.03 400.0 1897.23 0.00 1.13 402.0  
 1897.23 0.00 1.13 404.0 1897.23 0.00 1.13 411.0 1897.23 0.00 1.13 413.0  
 1897.23 0.00 1.03 416.0 1897.23 0.00 0.93 421.1 1897.23 0.00 0.68 432.1  
 1897.23 0.00 0.43 443.0 1897.23 0.00 0.43 445.0 1897.23 0.00 0.33 451.0  
 1897.23 0.00 0.23 455.0 1897.23 0.00 0.23 459.1 1897.23 0.00 0.13 461.1  
 1897.23 0.00 0.03 466.0 1897.23 0.00 0.03 468.0 1897.23 0.00 0.03 472.2  
 1897.23 0.00 -0.07 476.0 1897.23 0.00 -0.07 482.0 1897.23 0.00 -0.07 484.2  
 1897.23 0.00 -0.17 501.0 1897.23 0.00 -0.07 503.7 1897.23 0.00 0.13 520.3  
 1897.23 0.00 0.33 536.9 1897.23 0.00 0.43 539.9 1897.23 0.00 0.63 547.9

1897.23	0.00	0.73	550.9	1897.23	0.00	0.80	566.4	1897.23	0.00	0.87	581.8
1897.23	0.00	0.94	597.3	1897.23	0.00	1.01	612.7	1897.23	0.00	1.08	628.1
1895.52	0.00	-0.55	642.1	1897.23	0.00	1.23	659.0	1897.23	0.00	1.23	670.0
1897.23	0.00	1.23	684.0	1897.23	0.00	1.03	691.0	1897.23	0.00	0.93	698.0
1897.23	0.00	0.83	703.0	1897.23	0.00	0.83	708.0	1897.23	0.00	0.73	712.0
1897.23	0.00	0.73	718.0	1897.23	0.00	0.73	722.0	1897.23	0.00	0.73	727.0
1897.23	0.00	0.83	729.0	1897.23	0.00	0.93	733.0	1895.20	0.01	-0.95	738.9
1895.71	0.01	-0.29	749.2	1895.33	0.00	-1.42	771.6	1896.65	0.00	-0.85	785.9
1897.70	0.00	0.00	787.0	1898.00	0.00	0.00	793.0	1898.80	0.00	0.00	799.0

ID  
 34 SECTION 3300.00 TIME = 30.02 HRS WS = 1895.39 WIDTH = 79.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1901.90	0.00	0.00	0.0	1901.80	0.00	0.00	4.0	1901.50	0.00	0.00	13.0
1901.30	0.00	0.00	20.0	1901.20	0.00	0.00	24.0	1901.20	0.00	0.00	27.0
1901.20	0.00	0.00	29.0	1901.10	0.00	0.00	31.0	1901.10	0.00	0.00	32.0
1901.10	0.00	0.00	33.0	1901.10	0.00	0.00	34.0	1901.10	0.00	0.00	36.0
1901.00	0.00	0.00	37.0	1901.00	0.00	0.00	39.0	1900.90	0.00	0.00	41.0
1900.90	0.00	0.00	43.0	1900.70	0.00	0.00	50.0	1900.60	0.00	0.00	53.0
1900.30	0.00	0.00	62.0	1900.30	0.00	0.00	65.0	1900.10	0.00	0.00	74.0
1900.00	0.00	0.00	76.0	1899.90	0.00	0.00	83.0	1899.70	0.00	0.00	90.0
1899.70	0.00	0.00	92.0	1899.60	0.00	0.00	95.0	1899.60	0.00	0.00	98.0
1899.50	0.00	0.00	109.0	1899.50	0.00	0.00	110.0	1899.50	0.00	0.00	111.0
1899.50	0.00	0.00	112.0	1899.40	0.00	0.00	114.0	1899.40	0.00	0.00	115.0
1899.40	0.00	0.00	117.0	1899.30	0.00	0.00	120.0	1899.20	0.00	0.00	126.0
1899.20	0.00	0.00	128.0	1899.20	0.00	0.00	130.0	1899.10	0.00	0.00	135.0
1899.10	0.00	0.00	137.0	1899.00	0.00	0.00	142.0	1899.00	0.00	0.00	144.0
1898.90	0.00	0.00	159.0	1898.90	0.00	0.00	163.0	1898.90	0.00	0.00	164.0
1898.80	0.00	0.00	170.0	1898.70	0.00	0.00	176.0	1898.60	0.00	0.00	183.0
1898.50	0.00	0.00	186.0	1898.40	0.00	0.00	189.0	1898.20	0.00	0.00	195.0
1898.10	0.00	0.00	200.0	1898.05	0.00	0.00	209.0	1898.00	0.00	0.00	218.0
1897.80	0.00	0.00	225.0	1897.80	0.00	0.00	229.0	1897.80	0.00	0.00	232.0
1897.80	0.00	0.00	236.0	1897.80	0.00	0.00	237.0	1897.90	0.00	0.00	239.0
1897.90	0.00	0.00	240.0	1898.00	0.00	0.00	241.0	1898.10	0.00	0.00	244.0
1898.10	0.00	0.00	246.0	1898.20	0.00	0.00	249.0	1898.20	0.00	0.00	250.0
1898.20	0.00	0.00	252.0	1898.20	0.00	0.00	253.0	1898.20	0.00	0.00	258.0
1898.30	0.00	0.00	260.0	1898.30	0.00	0.00	267.0	1898.20	0.00	0.00	276.0
1898.10	0.00	0.00	288.5	1898.00	0.00	0.00	301.0	1897.70	0.00	0.00	307.0
1897.60	0.00	0.00	311.0	1897.10	0.00	0.00	323.0	1896.36	0.00	-0.19	334.5
1896.36	0.00	0.36	347.6	1896.36	0.00	0.46	349.9	1896.36	0.00	0.46	352.0
1896.36	0.00	0.56	354.9	1896.36	0.00	0.56	356.0	1896.36	0.00	0.56	359.0
1896.36	0.00	0.56	364.0	1896.36	0.00	0.66	366.0	1896.36	0.00	0.66	370.0
1896.36	0.00	0.66	374.0	1896.36	0.00	0.76	377.0	1896.36	0.00	0.76	379.0
1896.36	0.00	0.76	380.0	1896.36	0.00	0.86	382.0	1896.36	0.00	0.86	385.0
1896.36	0.00	0.86	387.0	1896.36	0.00	0.86	390.0	1896.36	0.00	0.86	392.0
1896.36	0.00	0.86	395.0	1896.36	0.00	0.86	397.0	1896.36	0.00	0.86	398.0
1896.36	0.00	0.86	399.0	1896.36	0.00	0.86	407.0	1896.36	0.00	0.86	410.0
1896.36	0.00	0.86	422.0	1896.36	0.00	0.76	424.0	1896.36	0.00	0.66	428.0
1896.36	0.00	0.56	429.0	1896.36	0.00	0.56	430.0	1896.36	0.00	0.56	433.0
1896.36	0.00	0.56	435.0	1896.36	0.00	0.46	438.0	1896.36	0.00	0.46	440.0
1896.36	0.00	0.46	443.0	1896.36	0.00	0.41	457.6	1896.36	0.00	0.36	472.0
1896.36	0.00	0.26	486.8	1896.36	0.00	0.16	501.4	1896.36	0.00	0.06	516.0
1896.36	0.00	0.17	518.9	1896.36	0.00	0.16	521.0	1896.36	0.00	0.26	525.9
1896.36	0.00	0.26	529.0	1896.36	0.00	0.26	530.0	1896.36	0.00	0.27	533.0
1896.36	0.00	0.27	548.3	1896.36	0.00	0.28	563.6	1896.36	0.00	0.29	578.9
1896.36	0.00	0.30	594.2	1896.36	0.00	0.31	609.5	1896.36	0.00	0.32	624.8
1896.36	0.00	0.33	640.1	1896.36	0.00	0.34	655.4	1896.36	0.00	0.35	670.7
1896.36	0.00	0.36	686.2	1896.36	0.00	0.36	687.2	1896.36	0.00	0.46	689.0
1896.35	0.00	0.55	691.8	1895.10	0.00	-0.50	693.6	1895.02	-0.01	-0.38	697.3
1895.01	-0.01	-0.29	699.1	1895.01	-0.01	-0.29	700.0	1895.00	-0.01	-0.10	701.0

1895.00 -0.01 0.00 702.0 1895.01 -0.01 0.11 703.0 1894.99 -0.01 0.09 715.0  
 1894.64 -0.02 -0.26 718.0 1894.66 -0.01 -0.34 719.0 1894.81 -0.01 -0.39 728.0  
 1894.84 -0.01 -0.56 737.0 1894.84 -0.01 -0.66 738.0 1894.84 -0.01 -0.66 739.0  
 1894.84 -0.01 -0.66 740.0 1894.83 -0.01 -0.67 741.0 1894.85 -0.01 -0.82 754.4  
 1894.93 0.00 -0.91 769.2 1896.42 0.00 0.42 781.0 1896.70 0.00 0.99 784.3  
 1896.70 0.00 0.70 789.1 1896.74 0.00 0.24 792.1 1896.75 0.00 0.15 793.0  
 1898.10 0.00 0.00 799.0

ID  
 33 SECTION 3200.00 TIME = 30.02 HRS WS = 1894.79 WIDTH = 87.5

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1901.80 0.00 0.00 0.0 1901.10 0.00 0.00 17.0 1900.70 0.00 0.00 0.00 28.0  
 1900.30 0.00 0.00 36.0 1899.90 0.00 0.00 50.0 1899.70 0.00 0.00 0.00 58.0  
 1899.70 0.00 0.00 60.0 1899.60 0.00 0.00 62.0 1899.40 0.00 0.00 0.00 71.0  
 1899.20 0.00 0.00 75.0 1899.10 0.00 0.00 82.0 1899.00 0.00 0.00 0.00 88.0  
 1898.90 0.00 0.00 92.0 1898.90 0.00 0.00 95.0 1898.80 0.00 0.00 0.00 101.0  
 1898.70 0.00 0.00 105.0 1898.60 0.00 0.00 108.0 1898.40 0.00 0.00 0.00 116.0  
 1898.20 0.00 0.00 123.0 1898.20 0.00 0.00 127.0 1898.00 0.00 0.00 0.00 137.0  
 1897.90 0.00 0.00 147.0 1897.80 0.00 0.00 162.0 1897.70 0.00 0.00 0.00 177.0  
 1897.60 0.00 0.00 192.0 1897.35 0.00 0.00 204.0 1897.10 0.00 0.00 0.00 216.0  
 1896.90 0.00 0.00 226.0 1896.80 0.00 0.00 232.0 1896.70 0.00 0.00 0.00 246.0  
 1896.70 0.00 0.00 248.0 1896.00 0.00 0.00 264.0 1896.20 0.00 0.00 0.00 273.0  
 1896.40 0.00 0.00 285.0 1896.40 0.00 0.00 297.0 1896.40 0.00 0.00 0.00 302.0  
 1896.30 0.00 0.00 309.0 1896.00 0.00 0.00 314.0 1895.90 0.00 0.00 0.00 318.0  
 1895.85 0.00 0.05 332.0 1895.81 0.00 0.11 333.4 1895.61 0.00 0.01 0.01 341.8  
 1895.61 0.00 0.10 349.9 1895.60 0.00 0.20 356.0 1895.61 0.00 0.45 0.45 372.4  
 1895.60 0.00 0.70 389.0 1895.60 0.00 0.70 394.0 1895.60 0.00 0.80 0.80 398.0  
 1895.60 0.00 0.80 400.0 1895.60 0.00 0.90 402.0 1895.60 0.00 0.90 0.90 405.0  
 1895.60 0.00 0.90 408.0 1895.60 0.00 1.00 410.9 1895.60 0.00 1.00 1.00 413.0  
 1895.60 0.00 1.00 417.0 1895.60 0.00 1.00 423.0 1895.60 0.00 1.00 1.00 429.0  
 1895.60 0.00 0.90 434.0 1895.60 0.00 0.80 436.0 1895.60 0.00 0.70 0.70 444.0  
 1895.60 0.00 0.60 446.0 1895.60 0.00 0.50 450.0 1895.60 0.00 0.50 0.50 453.0  
 1895.60 0.00 0.50 456.0 1895.60 0.00 0.50 460.0 1895.60 0.00 0.50 0.50 464.0  
 1895.60 0.00 0.40 467.1 1895.60 0.00 0.30 470.0 1895.60 0.00 0.20 0.20 472.0  
 1895.60 0.00 0.20 474.0 1895.60 0.00 0.20 477.0 1895.60 0.00 0.10 0.10 480.0  
 1895.60 0.00 0.10 482.0 1895.60 0.00 0.10 485.0 1895.60 0.00 0.10 0.10 488.0  
 1895.60 0.00 0.10 490.0 1895.60 0.00 0.20 495.0 1895.60 0.00 0.10 0.10 499.0  
 1895.60 0.00 0.10 504.0 1895.60 0.00 0.10 508.0 1895.60 0.00 0.20 0.20 511.0  
 1895.60 0.00 0.20 516.0 1895.60 0.00 0.30 519.0 1895.60 0.00 0.30 0.30 523.0  
 1895.60 0.00 0.40 525.9 1895.60 0.00 0.40 529.0 1895.60 0.00 0.50 0.50 532.9  
 1895.60 0.00 0.50 535.0 1895.60 0.00 0.60 538.0 1895.60 0.00 0.70 0.70 542.9  
 1895.60 0.00 0.70 547.0 1895.60 0.00 0.70 550.0 1895.60 0.00 0.70 0.70 557.2  
 1895.60 0.00 0.60 560.0 1895.60 0.00 0.60 564.0 1895.60 0.00 0.70 0.70 580.0  
 1895.60 0.00 0.60 583.0 1895.60 0.00 0.60 585.0 1895.60 0.00 0.60 0.60 589.0  
 1895.60 0.00 0.50 592.0 1895.60 0.00 0.50 595.0 1895.60 0.00 0.50 0.50 597.0  
 1895.60 0.00 0.40 599.0 1895.60 0.00 0.40 604.0 1895.60 0.00 0.40 0.40 606.4  
 1895.60 0.00 0.30 608.0 1895.60 0.00 0.30 610.0 1895.60 0.00 0.30 0.30 612.0  
 1895.60 0.00 0.20 616.0 1895.60 0.00 0.30 617.8 1895.60 0.00 0.30 0.30 620.0  
 1895.60 0.00 0.30 622.0 1895.51 0.00 0.21 623.9 1895.60 0.00 0.30 0.30 628.0  
 1895.60 0.00 0.30 633.0 1895.60 0.00 0.40 640.5 1895.50 0.00 0.30 0.30 649.9  
 1895.60 0.00 0.40 655.0 1895.60 0.00 0.40 658.0 1894.82 0.00 -0.39 663.7  
 1894.74 -0.01 -0.55 667.0 1894.74 0.00 -0.56 668.6 1894.73 0.00 -0.67 671.6  
 1894.55 0.00 -0.85 673.8 1895.59 0.00 0.20 676.0 1895.51 0.00 0.01 0.01 679.1  
 1895.60 0.00 0.20 682.0 1895.60 0.00 0.10 684.0 1895.60 0.00 0.10 0.10 688.0  
 1894.46 0.00 -0.94 690.1 1894.73 0.00 -0.66 692.5 1894.73 0.00 -0.67 694.5  
 1894.71 0.00 -0.69 696.3 1894.70 0.00 -0.60 698.7 1894.71 0.00 -0.59 702.0  
 1894.69 0.00 -0.51 704.8 1894.66 0.00 -0.44 708.0 1894.59 0.01 -0.50 712.0  
 1894.57 0.01 -0.43 715.0 1894.51 0.01 -0.49 719.0 1894.16 0.01 -0.79 735.0  
 1893.63 0.02 -1.27 751.0 1893.38 0.02 -1.42 756.0 1893.19 0.02 -1.52 760.0  
 1894.75 -0.01 0.25 767.4 1895.80 0.00 1.40 772.0 1896.08 0.00 0.00 0.00 780.0

ID  
32 SECTION 3100.00 TIME = 30.02 HRS WS =1893.74 WIDTH = 95.3

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1900.40	0.00	0.00	0.0	1900.00	0.00	0.00	8.0	1899.60	0.00	0.00	20.0
1899.30	0.00	0.00	30.0	1899.20	0.00	0.00	34.0	1899.00	0.00	0.00	41.0
1898.80	0.00	0.00	47.0	1898.60	0.00	0.00	55.0	1898.20	0.00	0.00	69.0
1898.00	0.00	0.00	77.0	1897.70	0.00	0.00	86.0	1897.60	0.00	0.00	94.0
1897.50	0.00	0.00	97.0	1897.40	0.00	0.00	102.0	1897.30	0.00	0.00	105.0
1897.20	0.00	0.00	108.0	1897.20	0.00	0.00	110.0	1897.10	0.00	0.00	114.0
1897.10	0.00	0.00	116.0	1897.00	0.00	0.00	119.0	1897.00	0.00	0.00	122.0
1897.00	0.00	0.00	124.0	1897.10	0.00	0.00	126.0	1897.20	0.00	0.00	129.0
1897.20	0.00	0.00	131.0	1897.20	0.00	0.00	139.0	1897.20	0.00	0.00	146.0
1897.10	0.00	0.00	151.0	1897.10	0.00	0.00	157.0	1897.10	0.00	0.00	160.0
1897.00	0.00	0.00	163.0	1897.00	0.00	0.00	166.0	1896.90	0.00	0.00	171.0
1896.90	0.00	0.00	175.0	1896.80	0.00	0.00	177.0	1896.80	0.00	0.00	180.0
1896.80	0.00	0.00	184.0	1896.70	0.00	0.00	187.0	1896.70	0.00	0.00	190.0
1896.70	0.00	0.00	193.0	1896.60	0.00	0.00	197.0	1896.70	0.00	0.00	204.0
1896.70	0.00	0.00	212.0	1896.70	0.00	0.00	214.0	1896.80	0.00	0.00	217.0
1896.80	0.00	0.00	221.0	1896.80	0.00	0.00	227.0	1896.80	0.00	0.00	233.0
1896.70	0.00	0.00	239.0	1896.70	0.00	0.00	243.0	1896.60	0.00	0.00	254.0
1896.50	0.00	0.00	261.0	1896.40	0.00	0.00	271.0	1896.20	0.00	0.00	278.0
1896.00	0.00	0.00	284.0	1895.90	0.00	0.00	289.0	1895.60	0.00	0.00	299.5
1895.30	0.00	0.00	310.0	1895.00	0.00	0.00	327.0	1894.44	0.00	-0.26	334.4
1893.55	0.00	-1.05	342.4	1893.53	0.00	-1.07	348.0	1893.54	0.00	-0.96	351.0
1893.54	0.00	-0.85	362.0	1893.54	0.00	-0.76	368.0	1893.53	0.00	-0.57	379.0
1893.52	0.00	-0.48	388.0	1893.54	0.00	-0.37	395.0	1893.43	-0.01	-0.47	402.0
1893.26	-0.01	-0.64	408.0	1893.19	-0.01	-0.71	410.0	1893.42	-0.01	-0.38	412.0
1893.08	-0.02	-0.73	418.0	1892.73	-0.03	-1.07	426.0	1891.85	-0.06	-1.96	433.3
1894.54	0.00	0.84	437.2	1894.54	0.00	0.74	439.9	1894.55	0.00	0.75	445.0
1894.55	0.00	0.55	453.0	1894.55	0.00	0.55	458.0	1894.56	0.00	0.46	464.0
1894.56	0.00	0.36	466.5	1894.56	0.00	0.26	470.0	1894.56	0.00	0.26	472.0
1894.56	0.00	0.26	475.0	1894.56	0.00	0.36	478.0	1894.57	0.00	0.37	483.0
1894.57	0.00	0.37	486.0	1894.57	0.00	0.47	489.5	1894.57	0.00	0.47	493.1
1894.57	0.00	0.52	502.0	1894.58	0.00	0.58	510.9	1894.58	0.00	0.47	513.4
1894.58	0.00	0.43	522.0	1894.59	0.00	0.38	531.0	1894.57	0.00	0.47	541.0
1894.57	0.00	0.47	545.0	1894.59	0.00	0.54	554.0	1894.58	0.00	0.58	563.0
1894.59	0.00	0.49	567.0	1894.59	0.00	0.39	572.0	1894.41	0.00	0.10	577.9
1894.78	0.00	0.38	582.0	1894.78	0.00	0.38	588.0	1894.47	0.00	0.07	590.3
1894.60	0.00	0.30	596.8	1894.60	0.00	0.40	600.0	1894.61	0.00	0.50	604.0
1894.60	0.00	0.50	606.0	1894.60	0.00	0.40	609.2	1894.61	0.00	0.31	613.8
1894.62	0.00	0.32	621.0	1894.61	0.00	0.41	621.4	1894.69	0.00	0.49	628.0
1894.72	0.00	0.52	634.9	1894.76	0.00	0.66	645.9	1894.77	0.00	0.67	653.2
1894.78	0.00	0.58	656.0	1894.78	0.00	0.48	658.0	1894.78	0.00	0.38	662.0
1894.78	0.00	0.38	666.0	1894.78	0.00	0.28	668.0	1894.78	0.00	0.18	672.0
1894.78	0.00	0.18	677.0	1894.78	0.00	0.18	680.0	1894.78	0.00	0.18	689.0
1894.79	0.00	0.19	693.2	1894.86	0.00	0.16	695.0	1895.13	0.00	0.00	701.0

ID  
31 SECTION 3000.00 TIME = 30.02 HRS WS =1892.69 WIDTH = 89.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1900.80	0.00	0.00	0.0	1900.00	0.00	0.00	12.0	1899.33	0.00	0.00	25.3
1898.67	0.00	0.00	38.7	1898.00	0.00	0.00	52.0	1897.50	0.00	0.00	69.0
1896.90	0.00	0.00	84.0	1896.55	0.00	0.00	94.5	1896.20	0.00	0.00	105.0
1896.00	0.00	0.00	112.0	1895.90	0.00	0.00	119.0	1895.80	0.00	0.00	124.0
1895.70	0.00	0.00	129.0	1895.60	0.00	0.00	132.0	1895.50	0.00	0.00	135.0
1895.50	0.00	0.00	137.0	1895.50	0.00	0.00	144.0	1895.60	0.00	0.00	148.0
1895.70	0.00	0.00	150.0	1895.80	0.00	0.00	156.0	1895.80	0.00	0.00	159.0

1895.80 0.00 0.00 165.0 1895.90 0.00 0.00 172.0 1895.90 0.00 0.00 178.0  
 1895.80 0.00 0.00 191.0 1895.80 0.00 0.00 194.0 1895.70 0.00 0.00 208.0  
 1895.60 0.00 0.00 210.0 1895.50 0.00 0.00 218.0 1895.40 0.00 0.00 222.0  
 1895.40 0.00 0.00 235.0 1895.40 0.00 0.00 248.0 1895.40 0.00 0.00 253.0  
 1895.40 0.00 0.00 255.0 1895.50 0.00 0.00 257.0 1895.30 0.00 0.00 269.0  
 1895.30 0.00 0.00 272.0 1895.20 0.00 0.00 275.0 1895.00 0.00 0.00 280.0  
 1894.90 0.00 0.00 282.0 1894.70 0.00 0.00 287.0 1894.50 0.00 0.00 292.0  
 1893.21 0.00 -0.79 302.2 1893.18 0.00 -0.62 315.7 1893.16 0.00 -0.44 327.6  
 1893.15 0.00 -0.25 341.9 1893.11 0.00 -0.09 354.9 1893.10 0.00 -0.10 359.0  
 1893.10 0.00 0.01 367.0 1893.10 0.00 0.10 375.0 1893.10 0.00 0.10 380.0  
 1893.10 0.00 0.10 385.0 1893.10 0.00 0.10 388.0 1892.52 -0.01 -0.38 391.8  
 1892.51 -0.01 -0.39 398.0 1892.50 -0.01 -0.30 400.0 1892.50 -0.01 -0.30 408.0  
 1892.50 -0.01 -0.30 411.0 1892.50 -0.01 -0.20 417.0 1892.50 -0.01 -0.19 420.0  
 1892.50 -0.01 -0.19 422.0 1892.49 0.01 -0.21 426.0 1892.46 0.01 -0.24 431.0  
 1892.44 0.01 -0.26 433.0 1891.72 0.02 -0.98 436.0 1891.77 0.02 -1.03 439.0  
 1891.81 0.02 -0.99 442.0 1891.84 0.02 -0.96 444.0 1891.88 0.01 -1.02 447.0  
 1891.91 0.01 -0.89 449.0 1892.09 0.01 -1.01 466.6 1891.21 0.00 -1.99 470.4  
 1893.00 -0.01 -0.30 474.0 1891.83 0.00 -1.47 475.6 1892.09 -0.01 -1.21 479.2  
 1893.44 0.00 0.04 483.0 1893.44 0.00 0.04 484.5 1893.44 0.00 -0.06 488.0  
 1893.44 0.00 0.04 490.0 1893.44 0.00 -0.06 493.3 1893.44 0.00 -0.16 496.0  
 1893.44 0.00 -0.16 499.9 1893.44 0.00 -0.06 503.9 1893.44 0.00 -0.06 506.0  
 1893.44 0.00 0.04 508.5 1893.44 0.00 0.04 513.0 1893.44 0.00 0.14 517.8  
 1893.44 0.00 0.34 533.9 1893.44 0.00 0.31 545.4 1893.44 0.00 0.28 556.6  
 1893.44 0.00 0.24 568.1 1893.44 0.00 0.24 579.0 1893.44 0.00 0.34 580.9  
 1893.44 0.00 0.34 583.9 1893.44 0.00 0.44 588.0 1893.44 0.00 0.34 599.2  
 1893.44 0.00 0.14 604.0 1893.44 0.00 0.14 607.0 1893.44 0.00 0.09 620.8  
 1893.44 0.00 0.04 634.5 1893.44 0.00 -0.01 648.2 1893.44 0.00 -0.06 661.8  
 1893.44 0.00 -0.06 665.1 1893.44 0.00 -0.16 667.0 1893.44 0.00 -0.16 669.0  
 1893.44 0.00 -0.16 671.9 1893.44 0.00 -0.21 682.1 1893.44 0.00 -0.26 692.0  
 1893.44 0.00 -0.26 695.0 1893.44 0.00 -0.26 698.1 1893.44 0.00 -0.36 699.9  
 1893.44 0.00 -0.36 703.0 1893.44 0.00 -0.36 706.7 1893.89 0.00 0.09 710.1  
 1894.03 0.00 0.23 714.9 1894.27 0.00 0.00 719.0

## ID

30 SECTION 2900.00 TIME = 30.02 HRS WS = 1891.71 WIDTH = 69.1

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1901.10 0.00 0.00 0.0 1900.30 0.00 0.00 8.0 1900.00 0.00 0.00 11.0  
 1899.70 0.00 0.00 18.0 1899.20 0.00 0.00 30.0 1898.90 0.00 0.00 37.0  
 1898.10 0.00 0.00 49.0 1897.90 0.00 0.00 54.0 1897.70 0.00 0.00 57.0  
 1897.14 0.00 0.00 72.0 1896.58 0.00 0.00 87.0 1896.02 0.00 0.00 102.0  
 1895.46 0.00 0.00 117.0 1894.90 0.00 0.00 132.0 1894.60 0.00 0.00 145.0  
 1894.40 0.00 0.00 152.0 1894.20 0.00 0.00 156.0 1894.20 0.00 0.00 158.0  
 1894.20 0.00 0.00 160.0 1894.10 0.00 0.00 162.0 1894.10 0.00 0.00 169.0  
 1894.20 0.00 0.00 171.0 1894.30 0.00 0.00 174.0 1894.30 0.00 0.00 179.0  
 1894.40 0.00 0.00 181.0 1894.50 0.00 0.00 184.0 1894.60 0.00 0.00 187.0  
 1894.60 0.00 0.00 189.0 1894.80 0.00 0.00 191.0 1894.80 0.00 0.00 199.0  
 1894.80 0.00 0.00 203.0 1894.80 0.00 0.00 207.0 1894.70 0.00 0.00 211.0  
 1894.60 0.00 0.00 214.0 1894.50 0.00 0.00 217.0 1894.40 0.00 0.00 222.0  
 1894.30 0.00 0.00 226.0 1894.30 0.00 0.00 231.0 1894.10 0.00 0.00 238.0  
 1894.00 0.00 0.00 248.0 1893.90 0.00 0.00 258.0 1893.93 0.00 0.00 269.3  
 1893.97 0.00 0.00 280.7 1894.00 0.00 0.00 292.0 1893.70 0.00 0.00 296.0  
 1893.10 0.00 0.00 308.0 1893.00 0.00 0.00 310.0 1892.28 0.00 -0.52 312.8  
 1892.27 0.00 -0.23 315.6 1892.27 0.00 -0.13 319.6 1891.95 0.00 -0.95 321.7  
 1893.00 0.00 0.00 325.0 1893.10 0.00 0.00 328.0 1893.10 0.00 0.00 331.0  
 1893.20 0.00 0.00 337.0 1893.20 0.00 0.00 339.0 1893.10 0.00 0.00 342.0  
 1893.10 0.00 0.00 346.0 1893.00 0.00 0.00 350.0 1891.82 0.00 -0.98 354.7  
 1892.27 0.00 -0.53 361.0 1892.27 0.00 -0.53 363.0 1892.27 0.00 -0.43 366.1  
 1892.27 0.00 -0.23 379.7 1892.27 0.00 -0.03 389.7 1892.27 0.00 0.17 400.0  
 1892.27 0.00 0.20 413.2 1892.27 0.00 0.22 426.5 1892.27 0.00 0.25 439.8  
 1892.27 0.00 0.27 453.0 1892.27 0.00 0.17 456.0 1892.27 0.00 0.07 459.0

1892.27 0.00 -0.03 466.0 1892.27 0.00 0.07 470.0 1892.27 0.00 0.17 474.0  
 1892.27 0.00 0.07 477.1 1892.27 0.00 -0.13 479.2 1892.27 0.00 -0.23 481.0  
 1892.27 0.00 -0.23 484.0 1892.27 0.00 -0.23 490.1 1892.27 0.00 -0.33 493.0  
 1892.27 0.00 -0.33 499.0 1892.27 0.00 -0.23 502.9 1892.27 0.00 -0.23 508.0  
 1892.27 0.00 -0.13 517.8 1892.27 0.00 -0.13 520.0 1892.28 0.00 -0.02 523.9  
 1892.28 0.00 -0.02 527.0 1892.28 0.00 0.08 530.0 1891.76 0.00 -0.24 535.0  
 1891.81 0.00 -0.19 543.0 1891.80 0.00 -0.20 554.8 1891.80 0.00 -0.21 566.3  
 1891.11 -0.01 -0.89 577.8 1891.10 0.02 -0.80 582.0 1891.08 0.02 -0.72 585.0  
 1891.06 0.02 -0.63 587.0 1891.06 0.02 -0.63 599.0 1891.09 0.02 -0.71 603.0  
 1891.11 0.02 -0.69 605.0 1891.13 0.01 -0.77 608.0 1890.49 0.00 -1.41 615.8  
 1892.27 0.00 0.27 619.0 1891.08 -0.01 -0.92 621.5 1891.53 -0.02 -0.57 629.3  
 1892.70 0.00 0.50 636.0 1892.70 0.00 0.40 641.1 1890.63 -0.01 -1.77 644.9  
 1892.26 0.00 -0.24 649.5 1891.66 -0.05 -0.84 651.6 1891.67 -0.02 -0.83 652.8  
 1892.75 0.00 0.15 656.0 1891.51 -0.02 -1.09 657.7 1892.78 0.00 0.08 664.0  
 1892.73 0.00 0.03 667.0 1891.68 -0.02 -0.93 668.5 1891.76 0.00 -0.84 677.4  
 1892.05 0.00 -0.65 678.1 1892.78 0.00 0.08 686.0 1891.74 0.00 -0.96 688.4  
 1891.75 0.00 -0.85 689.8 1892.41 0.00 -0.19 694.2 1891.78 0.00 -0.92 695.2  
 1892.88 0.00 0.08 700.0 1891.78 0.00 -0.92 703.7 1892.78 0.00 0.08 713.0  
 1891.90 0.00 -0.80 715.0 1892.88 0.00 0.08 721.0 1892.88 0.00 0.08 732.0  
 1892.31 0.00 -0.49 735.1 1892.70 0.00 0.00 736.9 1892.78 0.00 0.08 742.0  
 1892.70 0.00 0.00 745.9 1892.70 0.00 0.10 748.9 1892.78 0.00 0.18 755.0  
 1892.78 0.00 0.18 761.2 1892.88 0.00 0.38 764.0 1893.17 0.00 0.00 767.0

ID  
 29 SECTION 2800.00 TIME = 30.02 HRS WS = 1890.50 WIDTH = 73.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1901.20	0.00	0.00	0.0	1901.20	0.00	0.00	5.0	1901.30	0.00	0.00	9.0
1901.30	0.00	0.00	11.0	1901.30	0.00	0.00	15.0	1901.20	0.00	0.00	17.0
1900.90	0.00	0.00	22.0	1900.70	0.00	0.00	27.0	1900.20	0.00	0.00	35.0
1899.50	0.00	0.00	42.0	1898.00	0.00	0.00	55.0	1897.00	0.00	0.00	66.0
1896.00	0.00	0.00	77.0	1895.65	0.00	0.00	87.0	1895.30	0.00	0.00	97.0
1894.80	0.00	0.00	108.0	1894.20	0.00	0.00	125.0	1893.90	0.00	0.00	133.0
1893.80	0.00	0.00	135.0	1893.70	0.00	0.00	143.0	1893.60	0.00	0.00	146.0
1893.60	0.00	0.00	149.0	1893.40	0.00	0.00	154.0	1893.40	0.00	0.00	156.0
1893.30	0.00	0.00	160.0	1893.20	0.00	0.00	163.0	1893.20	0.00	0.00	167.0
1893.10	0.00	0.00	170.0	1893.00	0.00	0.00	172.0	1892.90	0.00	0.00	174.0
1893.00	0.00	0.00	180.0	1893.00	0.00	0.00	183.0	1893.10	0.00	0.00	185.0
1893.10	0.00	0.00	188.0	1893.20	0.00	0.00	190.0	1893.30	0.00	0.00	193.0
1893.40	0.00	0.00	196.0	1893.60	0.00	0.00	202.0	1893.60	0.00	0.00	209.0
1893.60	0.00	0.00	211.0	1893.60	0.00	0.00	213.0	1893.70	0.00	0.00	217.0
1893.70	0.00	0.00	219.0	1893.70	0.00	0.00	223.0	1893.60	0.00	0.00	225.0
1893.60	0.00	0.00	227.0	1893.50	0.00	0.00	230.0	1893.50	0.00	0.00	233.0
1893.40	0.00	0.00	235.0	1893.30	0.00	0.00	238.0	1893.20	0.00	0.00	242.0
1892.90	0.00	0.00	248.0	1892.80	0.00	0.00	253.0	1892.80	0.00	0.00	257.0
1892.60	0.00	0.00	262.0	1892.50	0.00	0.00	267.0	1892.40	0.00	0.00	270.0
1892.40	0.00	0.00	274.0	1891.98	0.00	-0.32	276.0	1891.40	0.00	-0.80	276.8
1892.03	0.00	-0.17	280.0	1891.15	0.00	-1.05	281.8	1892.30	0.00	0.00	291.0
1892.30	0.00	0.00	297.0	1892.40	0.00	0.00	302.0	1891.65	0.00	-0.65	305.0
1890.96	0.00	-1.24	306.1	1890.87	0.00	-1.13	311.2	1891.56	0.00	-0.24	322.9
1891.56	0.00	-0.14	330.0	1891.56	0.00	-0.04	337.0	1891.56	0.00	0.06	348.1
1891.56	0.00	0.16	354.0	1891.56	0.00	0.26	358.0	1891.56	0.00	0.26	362.0
1891.56	0.00	0.26	372.0	1891.56	0.00	0.26	382.0	1891.56	0.00	0.26	386.1
1891.56	0.00	0.06	395.0	1891.56	0.00	0.06	400.0	1891.56	0.00	0.06	404.0
1891.56	0.00	0.16	406.0	1891.56	0.00	0.16	409.0	1891.56	0.00	0.26	411.9
1891.56	0.00	0.26	415.0	1891.56	0.00	0.36	418.0	1891.56	0.00	0.36	420.0
1891.56	0.00	0.41	436.5	1891.56	0.00	0.46	453.0	1891.56	0.00	0.36	462.0
1891.56	0.00	0.26	464.0	1891.56	0.00	0.26	467.0	1891.56	0.00	0.26	470.1
1891.56	0.00	0.16	475.0	1891.56	0.00	0.16	478.0	1891.56	0.00	0.16	484.0
1891.56	0.00	0.16	487.0	1891.56	0.00	0.16	492.0	1891.56	0.00	0.06	499.0
1891.56	0.00	0.06	503.0	1891.56	0.00	0.16	505.0	1891.56	0.00	0.16	507.0

1891.56	0.00	0.16	510.0	1891.56	0.00	0.26	511.9	1890.64	0.00	-0.67	513.5
1891.37	0.00	0.17	516.1	1891.37	0.00	0.17	520.1	1891.37	0.00	0.17	522.0
1891.37	0.00	0.27	524.0	1891.37	0.00	0.37	527.0	1891.38	0.00	0.48	532.0
1891.37	0.00	0.47	537.0	1891.38	0.00	0.58	540.0	1891.37	0.00	0.57	546.0
1890.50	0.00	-0.20	548.4	1891.36	0.00	0.56	558.1	1890.40	0.01	-0.40	561.3
1891.37	0.00	0.47	565.0	1891.37	0.00	0.37	569.0	1889.37	-0.01	-1.43	574.0
1890.59	0.00	-0.11	581.0	1890.40	0.00	-0.20	583.0	1890.28	0.00	-0.32	585.0
1889.78	-0.01	-0.72	590.0	1889.35	-0.01	-1.15	593.0	1889.42	-0.01	-1.18	595.0
1889.48	-0.01	-1.12	597.0	1889.55	-0.01	-1.05	599.0	1889.62	-0.01	-1.09	601.0
1889.69	-0.01	-1.11	603.0	1889.76	-0.01	-1.04	605.0	1889.83	-0.01	-1.07	607.0
1889.90	-0.01	-1.00	609.0	1889.96	0.00	-0.94	611.0	1890.13	0.00	-0.87	615.0
1890.32	0.00	-0.78	629.0	1890.33	0.00	-0.87	636.4	1890.40	0.00	-1.00	642.0
1890.42	0.01	-0.88	644.6	1892.01	0.00	0.61	652.0	1892.01	0.00	0.61	654.0
1892.01	0.00	0.60	660.0	1892.01	0.00	0.61	664.0	1892.01	0.00	0.70	666.9
1892.01	0.00	0.71	671.0	1892.01	0.00	0.61	673.0	1892.01	0.00	0.60	676.0
1892.01	0.00	0.50	680.0	1892.01	0.00	0.50	682.1	1892.01	0.00	0.40	684.0
1892.01	0.00	0.40	688.0	1892.01	0.00	0.40	691.0	1892.01	0.00	0.41	697.0
1892.01	0.00	0.41	699.0	1892.01	0.00	0.41	703.0	1892.01	0.00	0.41	707.0
1892.01	0.00	0.50	708.9	1892.01	0.00	0.50	711.0	1892.01	0.00	0.61	716.0
1892.01	0.00	0.61	720.0	1892.01	0.00	0.60	723.0	1892.01	0.00	0.60	724.9
1892.01	0.00	0.60	729.9	1892.01	0.00	0.61	736.9	1892.01	0.00	0.51	740.9
1892.01	0.00	0.31	745.0	1892.01	0.00	0.40	747.4	1892.16	0.00	0.56	750.9
1892.44	0.00	0.00	753.0								

ID  
28 SECTION 2700.00 TIME = 30.02 HRS WS = 1889.54 WIDTH = 55.3

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1897.60	0.00	0.00	0.0	1897.70	0.00	0.00	4.0	1897.80	0.00	0.00	14.0
1897.80	0.00	0.00	23.0	1897.90	0.00	0.00	30.0	1897.80	0.00	0.00	35.0
1898.00	0.00	0.00	51.0	1896.80	0.00	0.00	64.0	1895.95	0.00	0.00	73.5
1895.10	0.00	0.00	83.0	1894.30	0.00	0.00	97.0	1893.80	0.00	0.00	109.0
1893.70	0.00	0.00	113.0	1893.20	0.00	0.00	128.0	1893.10	0.00	0.00	132.0
1893.00	0.00	0.00	139.0	1892.50	0.00	0.00	155.0	1892.25	0.00	0.00	171.0
1892.00	0.00	0.00	187.0	1891.90	0.00	0.00	201.5	1891.80	0.00	0.00	216.0
1891.80	0.00	0.00	226.0	1891.90	0.00	0.00	233.0	1891.90	0.00	0.00	239.0
1891.90	0.00	0.00	248.0	1892.00	0.00	0.00	254.0	1892.00	0.00	0.00	255.0
1892.10	0.00	0.00	261.0	1892.20	0.00	0.00	269.0	1892.10	0.00	0.00	274.0
1892.10	0.00	0.00	281.0	1891.80	0.00	0.00	292.0	1891.80	0.00	0.00	294.0
1891.60	0.00	0.00	299.0	1891.40	0.00	0.00	302.0	1891.30	0.00	0.00	305.0
1891.24	0.00	0.14	308.2	1891.17	0.00	0.16	313.9	1891.15	0.00	0.25	318.0
1891.09	0.00	0.19	323.1	1891.06	0.00	0.26	331.0	1890.82	0.00	0.12	334.6
1890.82	0.00	0.22	336.9	1890.82	0.00	0.32	338.9	1890.82	0.00	0.42	342.0
1890.82	0.00	0.32	344.0	1890.82	0.00	0.32	346.0	1890.82	0.00	0.32	348.0
1890.82	0.00	0.35	361.5	1890.82	0.00	0.37	375.0	1890.82	0.00	0.40	388.5
1890.82	0.00	0.43	402.0	1890.82	0.00	0.52	412.0	1890.82	0.00	0.62	419.0
1890.82	0.00	0.73	428.0	1890.82	0.00	0.72	431.0	1890.82	0.00	0.82	440.0
1890.82	0.00	0.93	446.0	1890.82	0.00	0.92	450.0	1890.82	0.00	0.82	452.0
1890.82	0.00	0.82	459.0	1890.82	0.00	0.72	464.0	1890.82	0.00	0.72	470.0
1890.82	0.00	0.72	475.0	1890.82	0.00	0.72	478.0	1890.82	0.00	0.62	491.0
1890.82	0.00	0.62	502.0	1890.67	0.00	0.47	506.8	1890.65	0.00	0.45	512.0
1890.65	0.00	0.56	519.0	1890.65	0.00	0.65	526.0	1890.64	0.00	0.74	529.9
1890.64	0.00	0.74	533.0	1890.65	0.00	0.85	535.0	1890.64	0.00	0.77	548.9
1890.64	0.00	0.71	563.0	1888.92	0.01	-1.08	575.5	1888.92	0.01	-0.88	579.6
1888.91	0.01	-0.89	592.0	1888.91	0.01	-0.89	598.0	1888.90	0.01	-0.80	604.0
1888.91	0.01	-0.79	611.0	1888.70	0.02	-1.00	615.0	1888.71	0.02	-1.09	620.2
1890.28	0.00	0.38	631.6	1890.28	0.00	0.28	646.0	1890.28	0.00	0.18	653.0
1890.28	0.00	0.18	661.0	1890.28	0.00	0.18	666.0	1890.28	0.00	0.08	670.0
1890.28	0.00	0.18	673.0	1890.28	0.00	0.17	680.0	1890.28	0.00	0.18	688.0
1890.28	0.00	0.18	694.1	1890.28	0.00	0.18	697.0	1890.61	0.00	0.51	703.7
1891.16	0.00	1.05	713.4	1891.26	0.00	1.26	718.8	1891.49	0.00	0.00	730.0

ID  
 27 SECTION 2600.00 TIME = 30.02 HRS WS =1888.64 WIDTH = 63.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1893.70	0.00	0.00	0.0	1894.00	0.00	0.00	7.0	1894.40	0.00	0.00	19.0
1894.60	0.00	0.00	23.0	1894.80	0.00	0.00	28.0	1894.90	0.00	0.00	35.0
1895.00	0.00	0.00	42.0	1895.20	0.00	0.00	45.0	1895.10	0.00	0.00	50.0
1895.10	0.00	0.00	59.0	1895.20	0.00	0.00	61.0	1895.30	0.00	0.00	66.0
1895.30	0.00	0.00	68.0	1895.30	0.00	0.00	72.0	1895.30	0.00	0.00	75.0
1895.20	0.00	0.00	79.0	1895.10	0.00	0.00	81.0	1894.90	0.00	0.00	86.0
1894.50	0.00	0.00	95.0	1894.00	0.00	0.00	105.0	1893.00	0.00	0.00	120.0
1892.00	0.00	0.00	135.0	1891.70	0.00	0.00	149.0	1891.50	0.00	0.00	152.0
1891.40	0.00	0.00	158.0	1891.30	0.00	0.00	165.0	1891.20	0.00	0.00	170.0
1891.20	0.00	0.00	174.0	1891.20	0.00	0.00	178.0	1891.10	0.00	0.00	184.0
1891.10	0.00	0.00	187.0	1891.10	0.00	0.00	191.0	1891.00	0.00	0.00	195.0
1890.90	0.00	0.00	201.0	1890.80	0.00	0.00	206.0	1890.70	0.00	0.00	216.0
1890.50	0.00	0.00	225.0	1890.50	0.00	0.00	228.0	1890.40	0.00	0.00	231.0
1890.40	0.00	0.00	233.0	1890.30	0.00	0.00	235.0	1890.30	0.00	0.00	237.0
1889.98	0.00	-0.22	238.8	1889.98	0.00	-0.22	247.0	1889.98	0.00	-0.22	250.0
1889.98	0.00	-0.22	255.0	1889.98	0.00	-0.22	259.0	1889.98	0.00	-0.22	263.0
1889.97	0.00	-0.13	268.8	1889.93	0.00	-0.17	271.0	1889.93	0.00	-0.17	278.0
1889.93	0.00	-0.07	279.9	1889.88	0.00	-0.22	283.0	1889.98	0.00	-0.22	286.2
1890.30	0.00	0.00	289.0	1889.98	0.00	-0.22	292.8	1889.69	0.00	-0.41	295.0
1889.93	0.00	-0.07	300.8	1889.98	0.00	0.08	308.9	1889.89	0.00	0.09	312.8
1889.98	0.00	0.18	319.0	1889.98	0.00	0.28	321.9	1889.98	0.00	0.28	324.0
1889.93	0.00	0.33	327.9	1889.93	0.00	0.33	334.0	1889.93	0.00	0.33	338.0
1889.93	0.00	0.43	339.9	1889.98	0.00	0.58	341.9	1889.93	0.00	0.53	344.0
1889.93	0.00	0.53	347.0	1889.98	0.00	0.68	348.9	1889.98	0.00	0.68	353.0
1889.41	0.00	0.10	357.7	1889.14	0.00	-0.16	367.4	1889.00	0.00	-0.40	368.6
1889.93	0.00	0.53	371.1	1889.93	0.00	0.43	373.0	1889.97	0.00	0.48	377.1
1889.98	0.00	0.38	383.0	1889.97	0.00	0.37	389.0	1889.93	0.00	0.33	391.0
1889.98	0.00	0.38	397.0	1889.98	0.00	0.38	400.1	1889.97	0.00	0.27	406.0
1889.97	0.00	0.27	408.0	1889.93	0.00	0.23	413.0	1889.98	0.00	0.28	415.0
1889.98	0.00	0.28	419.0	1889.60	0.00	-0.11	421.0	1888.93	0.00	-0.67	422.1
1889.75	0.00	0.15	426.0	1889.67	0.00	0.06	428.0	1889.75	0.00	0.25	429.7
1889.66	0.00	0.16	432.0	1889.75	0.00	0.45	433.8	1889.66	0.00	0.36	438.0
1889.68	0.00	0.38	440.0	1889.68	0.00	0.38	444.0	1889.66	0.00	0.46	450.0
1889.75	0.00	0.55	453.0	1889.75	0.00	0.65	455.9	1889.66	0.00	0.56	459.0
1889.75	0.00	0.65	461.0	1889.75	0.00	0.65	465.0	1889.66	0.00	0.55	468.0
1889.68	0.00	0.88	482.9	1888.02	-0.01	-0.59	487.4	1888.09	-0.01	-0.51	492.5
1888.00	-0.01	-0.50	496.0	1888.00	0.01	-0.40	499.0	1888.01	0.01	-0.39	501.0
1888.01	0.01	-0.29	503.0	1888.01	-0.01	-0.29	505.0	1888.01	0.01	-0.29	507.0
1888.01	0.01	-0.19	509.0	1887.95	0.01	-0.25	512.0	1887.89	0.01	-0.42	517.0
1887.86	0.01	-0.44	519.0	1887.77	0.01	-0.43	525.0	1887.77	0.01	-0.43	527.0
1887.83	0.01	-0.47	531.0	1887.89	0.01	-0.71	535.4	1888.00	-0.01	-0.70	537.9
1888.95	0.00	0.15	541.2	1888.29	-0.01	-0.61	543.1	1888.56	-0.01	-0.44	546.0
1888.28	-0.01	-0.72	546.5	1889.14	0.00	0.04	552.1	1888.39	-0.01	-0.71	557.8
1889.63	0.00	0.63	560.0	1889.64	0.00	0.73	564.0	1889.58	0.00	0.68	567.0
1889.63	0.00	0.83	569.9	1889.63	0.00	0.83	575.1	1889.63	0.00	0.73	579.0
1889.58	0.00	0.88	593.0	1888.81	0.00	0.41	600.2	1889.22	0.00	0.82	604.0
1889.24	0.00	0.94	606.0	1889.49	0.00	1.19	610.2	1889.59	0.00	1.19	613.3
1889.59	0.00	0.99	619.0	1889.59	0.00	0.99	622.0	1889.58	0.00	0.98	624.0
1889.59	0.00	0.79	638.0	1889.59	0.00	0.79	641.0	1889.60	0.00	0.50	656.1
1889.59	0.00	0.39	660.2	1889.60	0.00	0.20	663.2	1889.64	0.00	0.04	675.5
1890.05	0.00	0.25	686.0	1890.05	0.00	0.25	690.0	1890.05	0.00	0.25	704.2
1890.05	0.00	0.25	718.3	1890.05	0.00	0.25	732.5	1890.05	0.00	0.25	746.7
1890.05	0.00	0.25	760.8	1890.06	0.00	0.25	775.1	1890.16	0.00	0.36	782.0
1890.16	0.00	0.46	784.9	1890.42	0.00	0.00	787.0				

ID

26 SECTION 2500.00 TIME = 30.02 HRS WS = 1887.50 WIDTH = 47.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1891.70	0.00	0.00	0.0	1892.00	0.00	0.00	9.0	1892.20	0.00	0.00	14.0
1892.30	0.00	0.00	21.0	1892.40	0.00	0.00	25.0	1892.40	0.00	0.00	31.0
1892.50	0.00	0.00	35.0	1892.60	0.00	0.00	39.0	1892.60	0.00	0.00	42.0
1892.60	0.00	0.00	46.0	1892.60	0.00	0.00	51.0	1892.50	0.00	0.00	55.0
1892.30	0.00	0.00	57.0	1892.30	0.00	0.00	59.0	1892.30	0.00	0.00	61.0
1892.30	0.00	0.00	64.0	1892.30	0.00	0.00	68.0	1892.40	0.00	0.00	71.0
1892.60	0.00	0.00	74.0	1892.70	0.00	0.00	78.0	1892.70	0.00	0.00	84.0
1892.70	0.00	0.00	88.0	1892.60	0.00	0.00	92.0	1892.30	0.00	0.00	100.0
1892.00	0.00	0.00	109.0	1891.70	0.00	0.00	115.0	1891.50	0.00	0.00	120.0
1891.00	0.00	0.00	133.0	1890.70	0.00	0.00	140.0	1890.60	0.00	0.00	142.0
1890.40	0.00	0.00	150.0	1890.30	0.00	0.00	154.0	1890.10	0.00	0.00	159.0
1890.10	0.00	0.00	161.0	1890.10	0.00	0.00	177.0	1890.10	0.00	0.00	193.0
1890.00	0.00	0.00	200.0	1889.80	0.00	0.00	210.0	1889.70	0.00	0.00	216.0
1889.60	0.00	0.00	221.0	1889.35	0.00	0.00	233.0	1889.14	0.00	0.04	245.0
1889.12	0.00	0.02	249.0	1889.11	0.00	0.01	257.0	1889.11	0.00	0.01	262.0
1889.07	0.00	0.07	264.7	1888.44	0.00	-0.56	271.1	1888.44	0.00	-0.46	274.6
1888.44	0.00	-0.46	279.0	1888.44	0.00	-0.36	281.8	1888.44	0.00	-0.36	284.0
1888.44	0.00	-0.36	288.0	1888.44	0.00	-0.26	290.9	1888.44	0.00	-0.26	295.0
1888.44	0.00	-0.26	298.0	1888.44	0.00	-0.26	303.0	1888.44	0.00	-0.26	305.2
1888.44	0.00	-0.36	310.0	1888.44	0.00	-0.26	326.8	1888.44	0.00	-0.16	331.9
1888.44	0.00	-0.16	341.0	1888.44	0.00	-0.06	346.0	1888.44	0.00	-0.06	348.0
1888.44	0.00	-0.06	354.9	1888.44	0.00	0.04	358.1	1888.44	0.00	0.04	360.1
1888.44	0.00	0.04	364.0	1888.44	0.00	0.14	365.9	1888.44	0.00	0.14	369.0
1888.44	0.00	0.14	372.0	1888.44	0.00	0.04	375.0	1888.44	0.00	0.04	379.0
1888.44	0.00	-0.06	387.0	1888.44	0.00	-0.16	389.0	1888.44	0.00	-0.16	399.1
1888.44	0.00	-0.26	401.0	1888.44	0.00	-0.26	403.0	1888.44	0.00	-0.26	406.0
1888.44	0.00	-0.26	411.6	1888.44	0.00	-0.26	415.0	1888.44	0.00	-0.26	417.4
1888.44	0.00	-0.26	422.5	1888.44	0.00	-0.16	423.9	1888.44	0.00	-0.06	427.0
1888.44	0.00	-0.06	429.5	1888.44	0.00	0.04	436.0	1888.44	0.00	-0.06	439.0
1888.44	0.00	-0.06	449.5	1888.44	0.00	-0.06	455.0	1888.03	0.00	-0.47	459.0
1886.83	-0.01	-1.36	460.7	1886.80	-0.03	-1.40	473.0	1886.71	-0.03	-1.29	482.0
1886.74	-0.02	-1.30	500.2	1888.19	0.00	0.11	513.3	1888.18	0.00	0.06	529.0
1888.19	0.00	0.02	544.7	1888.19	0.00	-0.02	561.1	1888.19	0.00	-0.06	577.6
1888.95	0.00	0.66	591.7	1889.11	0.00	0.78	607.3	1889.11	0.00	0.73	623.0
1889.12	0.00	0.70	638.6	1889.11	0.00	0.65	654.3	1889.12	0.00	0.62	670.0
1889.13	0.00	0.63	672.1	1889.16	0.00	0.46	674.2	1889.17	0.00	0.37	677.0
1889.18	0.00	0.38	679.0	1889.19	0.00	0.39	682.0	1889.20	0.00	0.40	684.0
1889.23	0.00	0.33	687.9	1889.47	0.00	0.00	693.0				

ID  
25 SECTION 2400.00 TIME = 30.02 HRS WS = 1886.70 WIDTH = 66.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1890.10	0.00	0.00	0.0	1890.20	0.00	0.00	4.0	1890.30	0.00	0.00	11.0
1890.40	0.00	0.00	18.0	1890.40	0.00	0.00	21.0	1890.40	0.00	0.00	27.0
1890.30	0.00	0.00	37.0	1890.20	0.00	0.00	46.0	1890.20	0.00	0.00	48.0
1890.20	0.00	0.00	52.0	1890.00	0.00	0.00	61.0	1889.90	0.00	0.00	69.0
1889.90	0.00	0.00	76.0	1889.80	0.00	0.00	82.0	1889.70	0.00	0.00	87.0
1889.50	0.00	0.00	94.0	1889.30	0.00	0.00	102.0	1889.10	0.00	0.00	114.0
1889.10	0.00	0.00	121.0	1889.00	0.00	0.00	126.0	1888.90	0.00	0.00	131.0
1888.90	0.00	0.00	134.0	1888.90	0.00	0.00	139.0	1888.80	0.00	0.00	143.0
1888.70	0.00	0.00	148.0	1888.70	0.00	0.00	151.0	1888.70	0.00	0.00	153.0
1888.60	0.00	0.00	158.0	1888.50	0.00	0.00	160.0	1888.50	0.00	0.00	162.0
1888.40	0.00	0.00	165.0	1888.50	0.00	0.00	167.0	1888.60	0.00	0.00	169.0
1888.60	0.00	0.00	172.0	1888.70	0.00	0.00	177.0	1888.70	0.00	0.00	179.0
1888.80	0.00	0.00	182.0	1888.90	0.00	0.00	187.0	1888.90	0.00	0.00	191.0
1888.90	0.00	0.00	203.0	1888.90	0.00	0.00	206.0	1889.00	0.00	0.00	208.0

1888.90 0.00 0.00 218.0 1888.80 0.00 0.00 228.0 1888.80 0.00 0.00 231.0  
 1888.80 0.00 0.00 236.0 1888.70 0.00 0.00 240.0 1888.70 0.00 0.00 247.0  
 1888.60 0.00 0.00 251.0 1888.30 0.00 0.00 265.0 1888.10 0.00 0.00 278.0  
 1887.40 0.00 -0.40 280.1 1887.39 0.00 -0.11 297.0 1887.38 0.00 -0.12 304.0  
 1887.38 0.00 -0.12 311.0 1887.38 0.00 -0.02 314.0 1887.38 0.00 -0.02 320.0  
 1887.38 0.00 -0.02 324.0 1887.38 0.00 -0.02 329.0 1887.38 0.00 -0.12 341.0  
 1887.38 0.00 -0.22 353.0 1887.38 0.00 -0.22 355.0 1887.38 0.00 -0.32 369.0  
 1887.38 0.00 -0.32 373.0 1887.38 0.00 -0.32 377.0 1887.38 0.00 -0.23 380.0  
 1887.38 0.00 -0.23 382.0 1887.38 0.00 -0.12 387.0 1887.38 0.00 -0.12 391.0  
 1887.37 0.00 -0.13 404.0 1887.37 0.00 -0.13 417.0 1887.37 0.00 -0.13 421.0  
 1887.37 0.00 -0.13 424.0 1887.37 0.00 -0.03 429.0 1887.38 0.00 -0.02 433.0  
 1886.66 0.00 -0.74 437.2 1886.60 0.01 -0.70 440.8 1886.59 0.01 -0.61 444.0  
 1886.58 0.01 -0.52 447.0 1886.61 0.01 -0.49 451.0 1886.60 0.01 -0.50 454.0  
 1886.50 0.01 -0.60 464.0 1886.39 0.01 -0.71 468.0 1885.59 0.02 -1.50 481.0  
 1885.65 0.02 -1.65 499.7 1887.86 0.00 0.36 508.4 1887.86 0.00 0.16 522.1  
 1887.38 0.00 -0.42 523.2 1887.91 0.00 0.11 532.0 1887.91 0.00 0.11 541.0  
 1887.91 0.00 0.26 554.1 1887.83 0.00 0.33 567.4 1887.91 0.00 0.56 580.8  
 1887.91 0.00 0.71 594.0 1887.91 0.00 0.71 595.9 1887.91 0.00 0.66 605.0  
 1887.91 0.00 0.61 614.0 1887.91 0.00 0.61 620.0 1887.91 0.00 0.51 628.0  
 1887.91 0.00 0.61 633.0 1887.91 0.00 0.71 636.0 1887.91 0.00 0.61 638.0  
 1887.91 0.00 0.61 641.0 1887.91 0.00 0.51 642.9 1887.91 0.00 0.41 650.4  
 1888.02 0.00 0.42 656.9 1888.50 0.00 0.00 670.0

ID  
 24 SECTION 2300.00 TIME = 30.02 HRS WS = 1885.63 WIDTH = 60.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1888.10	0.00	0.00	0.0	1888.05	0.00	0.00	9.5	1888.00	0.00	0.00	19.0
1887.90	0.00	0.00	24.0	1887.80	0.00	0.00	28.0	1887.80	0.00	0.00	31.0
1887.80	0.00	0.00	33.0	1887.80	0.00	0.00	40.0	1887.80	0.00	0.00	49.0
1887.80	0.00	0.00	58.0	1887.90	0.00	0.00	62.0	1887.80	0.00	0.00	65.0
1887.80	0.00	0.00	79.0	1887.90	0.00	0.00	85.0	1887.90	0.00	0.00	87.0
1887.90	0.00	0.00	90.0	1887.90	0.00	0.00	95.0	1887.90	0.00	0.00	98.0
1888.00	0.00	0.00	103.0	1888.00	0.00	0.00	107.0	1887.90	0.00	0.00	115.0
1887.80	0.00	0.00	123.0	1887.70	0.00	0.00	128.0	1887.60	0.00	0.00	131.0
1887.60	0.00	0.00	134.0	1887.60	0.00	0.00	139.0	1887.60	0.00	0.00	144.0
1887.50	0.00	0.00	152.0	1887.50	0.00	0.00	155.0	1887.40	0.00	0.00	160.0
1887.30	0.00	0.00	162.0	1887.25	0.00	0.00	175.5	1887.20	0.00	0.00	189.0
1887.30	0.00	0.00	199.0	1887.30	0.00	0.00	203.0	1887.30	0.00	0.00	206.0
1887.30	0.00	0.00	210.0	1887.30	0.00	0.00	215.0	1887.40	0.00	0.00	218.0
1887.50	0.00	0.00	223.0	1887.70	0.00	0.00	235.0	1887.90	0.00	0.00	246.0
1887.90	0.00	0.00	254.0	1888.00	0.00	0.00	263.0	1887.80	0.00	0.00	271.0
1887.20	0.00	0.00	288.0	1886.67	0.00	-0.33	291.9	1886.64	0.00	-0.16	296.4
1886.64	0.00	-0.06	300.0	1886.64	0.00	0.14	301.9	1886.64	0.00	0.14	304.0
1886.64	0.00	0.33	308.0	1886.64	0.00	0.44	311.0	1886.63	0.00	0.53	315.0
1886.64	0.00	0.44	319.0	1886.64	0.00	0.36	333.5	1886.64	0.00	0.29	348.0
1886.63	0.00	0.21	362.5	1886.64	0.00	0.14	377.0	1886.64	0.00	0.14	381.1
1886.64	0.00	0.04	383.0	1886.64	0.00	0.04	387.0	1886.64	0.00	0.14	390.9
1886.63	0.00	0.13	397.0	1886.63	0.00	0.13	404.0	1886.64	0.00	0.14	411.0
1886.64	0.00	0.24	414.0	1886.64	0.00	0.29	423.0	1886.64	0.00	0.33	431.9
1886.63	0.00	0.33	434.9	1886.64	0.00	0.44	443.0	1886.63	0.00	0.54	446.0
1886.64	0.00	0.54	454.2	1886.63	0.00	0.53	457.0	1886.64	0.00	0.54	463.8
1886.63	0.00	0.54	479.2	1886.64	0.00	0.54	494.4	1886.63	0.00	0.53	509.7
1886.64	0.00	0.54	524.9	1886.64	0.00	0.54	540.1	1886.64	0.00	0.54	543.0
1885.11	-0.01	-0.94	551.2	1885.09	-0.01	-0.91	563.0	1885.09	-0.01	-1.01	569.0
1885.09	-0.01	-1.01	578.0	1885.10	-0.01	-0.90	584.0	1885.08	0.01	-0.92	591.0
1884.56	0.00	-1.44	595.0	1884.56	0.00	-1.55	601.8	1886.44	0.00	0.24	615.0
1886.44	0.00	0.14	618.0	1886.44	0.00	0.14	621.0	1886.44	0.00	0.04	624.0
1886.44	0.00	0.04	627.1	1886.44	0.00	-0.16	638.2	1886.44	0.00	-0.36	652.2
1886.44	0.00	-0.46	662.4	1886.44	0.00	-0.66	676.6	1887.20	0.00	0.00	683.0
1887.30	0.00	0.00	691.0	1887.30	0.00	0.00	696.0	1887.40	0.00	0.00	698.0

1887.40 0.00 0.00 702.0 1887.40 0.00 0.00 706.0 1887.40 0.00 0.00 709.0  
 1887.50 0.00 0.00 713.0 1887.60 0.00 0.00 716.0 1887.60 0.00 0.00 719.0  
 1887.60 0.00 0.00 724.0 1887.60 0.00 0.00 729.0 1887.60 0.00 0.00 737.0  
 1887.70 0.00 0.00 744.0 1887.70 0.00 0.00 752.0 1887.85 0.00 0.00 765.5  
 1888.00 0.00 0.00 779.0 1887.40 0.00 0.00 796.0 1887.40 0.00 0.00 798.0

ID  
 23 SECTION 2200.00 TIME = 30.02 HRS WS = 1884.61 WIDTH = 49.8

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1886.33 0.00 0.00 0.0 1885.95 0.00 0.05 4.0 1885.95 0.00 -0.05 8.0  
 1885.66 0.00 -0.34 10.8 1886.20 0.00 0.00 18.0 1886.30 0.00 0.00 23.0  
 1886.30 0.00 0.00 26.0 1886.40 0.00 0.00 28.0 1886.40 0.00 0.00 31.0  
 1886.40 0.00 0.00 38.0 1886.40 0.00 0.00 40.0 1886.40 0.00 0.00 51.0  
 1886.40 0.00 0.00 56.0 1886.40 0.00 0.00 65.0 1886.40 0.00 0.00 70.0  
 1886.40 0.00 0.00 73.0 1886.30 0.00 0.00 77.0 1886.20 0.00 0.00 85.0  
 1886.30 0.00 0.00 87.0 1886.30 0.00 0.00 93.0 1886.30 0.00 0.00 98.0  
 1886.20 0.00 0.00 110.0 1886.20 0.00 0.00 115.0 1886.30 0.00 0.00 120.0  
 1886.30 0.00 0.00 125.0 1886.40 0.00 0.00 135.0 1886.30 0.00 0.00 144.0  
 1886.30 0.00 0.00 152.0 1886.30 0.00 0.00 157.0 1886.20 0.00 0.00 164.0  
 1885.62 0.00 -0.48 169.0 1885.64 0.00 -0.36 177.2 1885.65 0.00 -0.35 190.5  
 1884.99 0.00 -1.01 203.7 1886.20 0.00 0.00 214.0 1886.30 0.00 0.00 222.0  
 1886.30 0.00 0.00 226.0 1886.40 0.00 0.00 229.0 1886.50 0.00 0.00 239.0  
 1886.50 0.00 0.00 246.0 1886.50 0.00 0.00 252.0 1886.50 0.00 0.00 261.0  
 1886.40 0.00 0.00 273.0 1886.40 0.00 0.00 277.0 1886.40 0.00 0.00 280.0  
 1886.30 0.00 0.00 284.0 1886.30 0.00 0.00 287.0 1885.75 0.00 -0.45 292.0  
 1884.96 0.00 -1.14 293.1 1885.65 0.00 -0.35 298.9 1885.64 0.00 -0.26 304.3  
 1885.65 0.00 -0.05 309.8 1885.65 0.00 0.15 317.9 1885.65 0.00 0.25 333.5  
 1885.64 0.00 0.35 349.0 1885.64 0.00 0.35 352.0 1885.64 0.00 0.34 357.0  
 1885.64 0.00 0.34 370.0 1885.64 0.00 0.35 373.0 1885.65 0.00 0.45 376.0  
 1885.65 0.00 0.55 387.0 1885.64 0.00 0.54 400.0 1885.64 0.00 0.54 409.0  
 1885.65 0.00 0.45 412.0 1885.64 0.00 0.24 426.0 1885.64 0.00 0.24 428.0  
 1885.64 0.00 0.24 441.0 1885.64 0.00 0.24 443.0 1885.64 0.00 0.34 446.0  
 1885.65 0.00 0.35 448.0 1884.64 0.00 -0.56 451.3 1884.40 0.01 -0.70 456.1  
 1884.97 0.00 -0.23 468.0 1884.59 0.00 -0.61 471.9 1884.33 -0.01 -0.87 477.0  
 1883.72 -0.02 -1.48 481.0 1883.70 -0.03 -1.40 484.0 1883.69 -0.03 -1.41 487.0  
 1883.67 -0.03 -1.33 490.0 1883.60 -0.03 -1.40 494.0 1883.62 -0.03 -1.48 497.0  
 1883.63 -0.03 -1.47 499.0 1883.77 -0.01 -1.33 510.0 1884.93 0.00 -0.27 514.0  
 1884.94 0.00 -0.26 522.9 1884.97 0.00 -0.23 525.3 1885.61 0.00 0.31 527.0  
 1885.61 0.00 0.31 530.0 1885.54 0.00 0.34 532.8 1885.61 0.00 0.41 536.1  
 1885.61 0.00 0.41 540.0 1885.61 0.00 0.42 542.0 1885.58 0.00 0.48 551.7  
 1885.61 0.00 0.41 568.5 1885.61 0.00 0.31 585.0 1885.61 0.00 0.31 591.0  
 1885.61 0.00 0.21 599.0 1885.61 0.00 0.11 603.0 1885.61 0.00 0.11 612.0  
 1885.61 0.00 0.01 617.1 1885.61 0.00 -0.09 623.0 1885.61 0.00 -0.09 626.2  
 1885.61 0.00 -0.29 632.1 1885.62 0.00 -0.38 640.9 1886.10 0.00 0.00 643.0  
 1886.10 0.00 0.00 647.0 1886.20 0.00 0.00 658.0 1886.20 0.00 0.00 664.0  
 1886.20 0.00 0.00 670.0 1886.20 0.00 0.00 675.0 1886.20 0.00 0.00 680.0  
 1886.10 0.00 0.00 687.0 1886.30 0.00 0.00 699.3 1886.50 0.00 0.00 711.7  
 1886.70 0.00 0.00 724.0 1886.90 0.00 0.00 735.5 1887.10 0.00 0.00 747.0  
 1887.30 0.00 0.00 760.0 1887.60 0.00 0.00 777.0 1887.65 0.00 0.00 786.5  
 1887.70 0.00 0.00 796.0 1888.20 0.00 0.00 800.0

ID  
 22 SECTION 2100.00 TIME = 30.02 HRS WS = 1883.67 WIDTH = 51.3

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1885.50 0.00 0.00 224.0 1885.30 0.00 0.00 240.0 1885.30 0.00 0.00 242.0  
 1885.40 0.00 0.00 247.0 1885.40 0.00 0.00 251.0 1885.40 0.00 0.00 255.0  
 1885.30 0.00 0.00 259.0 1885.30 0.00 0.00 264.0 1885.30 0.00 0.00 267.0  
 1885.19 0.00 -0.01 269.0 1885.19 0.00 -0.01 271.0 1885.19 0.00 -0.01 273.0

1884.49	0.00	-0.61	274.2	1884.48	0.00	-0.62	278.0	1884.48	0.00	-0.52	279.9
1884.48	0.00	-0.42	282.0	1884.48	0.00	-0.42	285.0	1884.48	0.00	-0.32	290.0
1884.48	0.00	-0.32	293.0	1884.48	0.00	-0.22	296.7	1884.48	0.00	-0.12	302.0
1884.48	0.00	-0.12	310.0	1884.48	0.00	-0.12	315.0	1884.48	0.00	-0.12	319.0
1884.48	0.00	-0.09	330.3	1884.48	0.00	-0.06	341.6	1884.48	0.00	-0.02	353.0
1884.48	0.00	0.08	358.0	1884.48	0.00	0.18	364.0	1884.48	0.00	0.28	371.1
1884.48	0.00	0.33	383.2	1884.48	0.00	0.38	395.1	1884.48	0.00	0.38	406.9
1884.48	0.00	0.28	413.0	1884.48	0.00	0.28	416.0	1884.48	0.00	0.28	424.8
1884.48	0.00	0.28	433.9	1884.48	0.00	0.28	447.0	1884.48	0.00	0.28	457.0
1884.48	0.00	0.28	462.0	1882.89	0.01	-1.11	467.5	1882.85	0.01	-1.15	474.0
1883.03	0.01	-0.87	478.0	1883.03	0.01	-0.97	484.0	1883.04	0.01	-1.01	495.5
1882.93	0.01	-1.17	509.6	1884.70	0.00	0.50	513.0	1883.08	0.01	-1.02	518.0
1884.67	0.00	0.57	526.5	1884.70	0.00	0.60	532.0	1884.70	0.00	0.70	541.9
1884.68	0.00	0.68	544.0	1884.70	0.00	0.60	549.0	1884.68	0.00	0.48	553.0
1884.68	0.00	0.38	561.9	1884.68	0.00	0.38	574.9	1884.70	0.00	0.40	588.0
1884.68	0.00	0.18	601.0	1884.70	0.00	0.10	611.1	1884.70	0.00	-0.10	616.4
1884.70	0.00	-0.30	625.3	1884.70	0.00	-0.40	630.0	1884.70	0.00	-0.40	635.7
1884.70	0.00	-0.50	636.1	1885.19	0.00	-0.01	640.0	1885.30	0.00	0.00	643.0
1885.30	0.00	0.00	649.0	1885.30	0.00	0.00	653.0	1885.38	0.00	0.00	669.3
1885.46	0.00	0.00	685.7	1885.53	0.00	0.00	702.0	1885.61	0.00	0.00	718.3
1885.69	0.00	0.00	734.7	1885.77	0.00	0.00	751.0	1885.84	0.00	0.00	767.3
1885.92	0.00	0.00	783.7	1886.00	0.00	0.00	800.0				

ID  
21 SECTION 2000.00 TIME = 30.02 HRS WS = 1882.65 WIDTH = 57.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1884.53	0.00	0.00	237.0	1884.40	0.00	0.00	240.0	1884.40	0.00	0.00	246.0
1884.40	0.00	0.00	249.0	1884.40	0.00	0.00	255.0	1884.40	0.00	0.00	261.0
1883.94	0.00	-0.36	264.3	1883.86	0.00	-0.44	271.0	1883.83	0.00	-0.47	276.0
1883.83	0.00	-0.37	287.7	1883.83	0.00	-0.37	293.0	1883.83	0.00	-0.27	297.0
1883.83	0.00	-0.27	301.0	1883.83	0.00	-0.17	303.8	1883.83	0.00	-0.07	308.0
1883.83	0.00	-0.07	312.0	1883.83	0.00	0.13	314.9	1883.83	0.00	0.23	316.9
1883.83	0.00	0.33	320.0	1883.83	0.00	0.43	323.0	1883.83	0.00	0.43	326.0
1883.83	0.00	0.53	340.0	1883.83	0.00	0.53	342.0	1883.83	0.00	0.53	347.0
1883.83	0.00	0.53	354.1	1883.83	0.00	0.43	358.0	1883.83	0.00	0.42	363.0
1883.82	0.00	0.42	367.0	1883.82	0.00	0.42	379.0	1883.82	0.00	0.42	382.0
1883.82	0.00	0.52	385.0	1883.82	0.00	0.52	390.0	1883.83	0.00	0.63	395.8
1883.70	0.00	0.60	403.9	1883.68	0.00	0.68	409.0	1883.68	0.00	0.78	413.1
1883.66	0.00	0.77	417.1	1883.58	0.00	0.67	423.0	1883.52	0.00	0.62	430.1
1883.35	0.00	0.35	430.9	1882.46	0.00	-0.55	434.2	1882.35	0.00	-0.65	437.0
1882.36	0.00	-0.54	440.1	1882.33	0.00	-0.57	448.1	1882.26	0.00	-0.64	453.0
1882.23	0.00	-0.67	455.0	1882.17	0.00	-0.63	459.0	1882.10	0.00	-0.70	463.0
1881.67	0.01	-1.13	467.0	1881.68	0.01	-1.22	472.0	1881.69	0.01	-1.31	474.0
1881.69	0.01	-1.55	487.3	1883.69	0.00	0.19	495.1	1883.69	0.00	0.09	498.0
1883.69	0.00	0.09	500.0	1883.69	0.00	0.09	502.1	1883.70	0.00	0.20	515.4
1883.70	0.00	0.30	527.9	1883.70	0.00	0.20	544.6	1883.71	0.00	0.11	561.0
1883.71	0.00	0.11	567.1	1883.71	0.00	0.04	579.7	1883.71	0.00	-0.02	592.3
1883.71	0.00	-0.09	605.3	1883.73	0.00	-0.27	619.0	1883.79	0.00	-0.41	634.3
1884.40	0.00	0.00	650.0	1884.40	0.00	0.00	658.0	1884.50	0.00	0.00	661.0
1884.50	0.00	0.00	664.0	1884.40	0.00	0.00	671.0	1884.50	0.00	0.00	678.0
1884.60	0.00	0.00	689.0	1884.70	0.00	0.00	695.0	1884.70	0.00	0.00	699.0
1884.80	0.00	0.00	704.0	1884.80	0.00	0.00	708.0	1884.90	0.00	0.00	711.0
1884.90	0.00	0.00	713.0	1885.00	0.00	0.00	718.0	1885.00	0.00	0.00	724.0
1884.90	0.00	0.00	726.0	1884.90	0.00	0.00	741.0	1884.90	0.00	0.00	744.0
1884.90	0.00	0.00	746.0	1885.00	0.00	0.00	751.0	1884.90	0.00	0.00	754.0
1884.90	0.00	0.00	757.0	1884.90	0.00	0.00	765.0	1884.90	0.00	0.00	769.0
1884.90	0.00	0.00	775.0	1884.80	0.00	0.00	779.0	1884.80	0.00	0.00	783.0
1884.80	0.00	0.00	786.0	1884.70	0.00	0.00	789.0	1884.60	0.00	0.00	797.0

ID

20 SECTION 1900.00 TIME = 30.02 HRS WS = 1881.69 WIDTH = 43.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1883.61	0.00	0.00	220.0	1883.60	0.00	0.00	225.0	1883.60	0.00	0.00	228.0
1883.50	0.00	0.00	231.0	1883.50	0.00	0.00	233.0	1883.11	0.00	-0.29	234.8
1882.46	0.00	-0.84	242.9	1882.39	0.00	-0.91	246.7	1883.05	0.00	-0.15	247.8
1882.33	0.00	-0.87	250.4	1882.45	0.00	-0.65	254.9	1882.45	0.00	-0.55	258.6
1882.45	0.00	-0.55	262.0	1882.45	0.00	-0.35	268.8	1882.45	0.00	-0.35	274.0
1882.45	0.00	-0.25	276.9	1882.45	0.00	-0.25	280.0	1882.45	0.00	-0.05	286.9
1882.45	0.00	0.15	297.8	1882.45	0.00	0.25	304.8	1882.45	0.00	0.45	314.0
1882.45	0.00	0.45	317.6	1882.45	0.00	0.55	324.1	1882.45	0.00	0.55	328.2
1882.45	0.00	0.65	338.4	1882.45	0.00	0.65	341.7	1882.22	0.00	0.42	357.9
1880.70	-0.02	-1.10	366.9	1880.70	0.00	-1.10	371.0	1880.70	0.00	-1.10	379.0
1880.70	0.00	-1.10	386.0	1880.70	0.00	-1.10	390.0	1880.70	0.00	-1.20	392.4
1882.04	0.00	0.11	408.6	1882.09	0.00	0.14	425.4	1882.20	0.00	0.23	443.9
1883.10	0.00	1.10	459.0	1883.10	0.00	0.90	475.0	1883.11	0.00	0.80	488.0
1883.11	0.00	0.71	493.0	1883.11	0.00	0.51	502.0	1883.11	0.00	0.51	506.1
1883.10	0.00	0.40	510.1	1883.10	0.00	0.30	514.1	1883.10	0.00	0.20	523.0
1883.10	0.00	0.20	526.2	1883.11	0.00	0.11	530.0	1883.10	0.00	0.10	534.9
1883.10	0.00	0.10	538.3	1883.11	0.00	0.01	540.0	1883.10	0.00	0.00	543.1
1883.10	0.00	-0.10	550.0	1883.10	0.00	-0.10	556.0	1883.10	0.00	-0.10	558.0
1883.11	0.00	-0.09	564.0	1883.11	0.00	-0.09	566.4	1883.10	0.00	-0.20	570.0
1883.10	0.00	-0.20	573.0	1883.10	0.00	-0.20	579.0	1883.10	0.00	-0.20	584.0
1883.10	0.00	-0.20	593.0	1883.10	0.00	-0.15	603.1	1883.11	0.00	-0.09	613.9
1883.10	0.00	-0.10	617.0	1883.10	0.00	-0.10	623.0	1883.10	0.00	-0.10	626.0
1883.10	0.00	-0.10	632.2	1883.10	0.00	-0.20	636.3	1883.11	0.00	-0.29	642.0
1883.13	0.00	-0.27	648.2	1883.50	0.00	0.00	653.0	1883.60	0.00	0.00	656.0
1883.70	0.00	0.00	661.0	1883.80	0.00	0.00	671.0	1884.00	0.00	0.00	687.0
1883.90	0.00	0.00	690.0	1883.90	0.00	0.00	700.0	1883.85	0.00	0.00	712.5
1883.80	0.00	0.00	725.0	1883.80	0.00	0.00	730.0	1883.80	0.00	0.00	734.0
1883.90	0.00	0.00	739.0	1883.90	0.00	0.00	746.0	1883.80	0.00	0.00	752.0
1883.70	0.00	0.00	759.0	1883.70	0.00	0.00	763.0	1883.70	0.00	0.00	775.0
1883.70	0.00	0.00	781.0	1883.70	0.00	0.00	786.0	1883.61	0.00	0.00	800.0

ID  
19 SECTION 1800.00 TIME = 30.02 HRS WS = 1880.71 WIDTH = 46.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1883.50	0.00	0.00	0.0	1883.60	0.00	0.00	2.0	1883.60	0.00	0.00	6.0
1883.40	0.00	0.00	23.0	1883.40	0.00	0.00	25.0	1883.30	0.00	0.00	29.0
1883.30	0.00	0.00	32.0	1883.20	0.00	0.00	38.0	1883.20	0.00	0.00	40.0
1883.20	0.00	0.00	43.0	1883.10	0.00	0.00	45.0	1883.10	0.00	0.00	49.0
1883.10	0.00	0.00	56.0	1883.00	0.00	0.00	60.0	1883.00	0.00	0.00	62.0
1882.90	0.00	0.00	65.0	1882.90	0.00	0.00	68.0	1882.80	0.00	0.00	71.0
1882.80	0.00	0.00	73.0	1882.80	0.00	0.00	78.0	1882.80	0.00	0.00	81.0
1882.80	0.00	0.00	85.0	1882.80	0.00	0.00	91.0	1882.80	0.00	0.00	94.0
1882.90	0.00	0.00	107.0	1883.00	0.00	0.00	112.0	1883.00	0.00	0.00	118.0
1883.00	0.00	0.00	122.0	1883.00	0.00	0.00	127.0	1883.00	0.00	0.00	130.0
1883.10	0.00	0.00	135.0	1883.10	0.00	0.00	140.0	1883.10	0.00	0.00	144.0
1883.10	0.00	0.00	152.0	1883.10	0.00	0.00	156.0	1883.10	0.00	0.00	158.0
1883.00	0.00	0.00	165.0	1883.10	0.00	0.00	171.0	1883.10	0.00	0.00	176.0
1883.10	0.00	0.00	179.0	1883.20	0.00	0.00	184.0	1883.20	0.00	0.00	186.0
1883.30	0.00	0.00	188.0	1883.30	0.00	0.00	191.0	1883.40	0.00	0.00	197.0
1883.50	0.00	0.00	199.0	1883.50	0.00	0.00	202.0	1883.60	0.00	0.00	208.0
1883.60	0.00	0.00	220.0	1883.60	0.00	0.00	223.0	1883.50	0.00	0.00	225.0
1883.40	0.00	0.00	227.0	1883.20	0.00	0.00	233.0	1883.20	0.00	0.00	235.0
1883.20	0.00	0.00	239.0	1883.10	0.00	0.00	242.0	1883.10	0.00	0.00	246.0
1882.90	0.00	0.00	252.0	1882.80	0.00	0.00	258.0	1882.70	0.00	0.00	265.0
1881.65	0.00	-0.85	272.3	1881.65	0.00	-0.65	282.4	1881.65	0.00	-0.45	291.8
1881.65	0.00	-0.25	303.4	1881.65	0.00	-0.05	315.0	1881.65	0.00	0.25	328.9

1881.65 0.00 0.40 339.5 1881.65 0.00 0.55 349.9 1881.65 0.00 0.75 363.0  
 1881.65 0.00 0.85 368.9 1881.65 0.00 0.95 373.0 1880.42 0.01 -0.28 376.8  
 1880.09 0.00 -0.50 382.1 1879.98 -0.01 -0.52 386.1 1879.94 -0.01 -0.56 388.0  
 1879.89 -0.01 -0.60 395.0 1879.89 -0.01 -0.51 397.0 1879.87 -0.01 -0.53 400.0  
 1879.86 -0.01 -0.54 403.0 1879.85 -0.01 -0.55 405.0 1879.85 -0.01 -0.55 409.0  
 1880.06 -0.01 -0.43 419.0 1880.17 0.01 -0.43 421.0 1880.80 0.00 0.20 422.9  
 1880.80 0.00 0.10 425.0 1880.80 0.00 0.00 427.0 1880.80 0.00 -0.10 432.9  
 1880.82 0.00 -0.08 435.1 1881.45 0.00 0.55 436.0 1881.72 0.00 0.82 440.0  
 1881.72 0.00 0.82 441.8 1881.72 0.00 0.52 451.0 1881.72 0.00 0.32 454.9  
 1881.72 0.00 0.12 458.7 1880.85 0.00 -0.95 463.5 1882.28 0.00 0.48 469.0  
 1881.55 0.00 -0.25 470.4 1881.72 0.00 -0.18 477.0 1881.72 0.00 -0.18 481.0  
 1881.72 0.00 -0.03 489.9 1881.72 0.00 0.12 498.9 1881.59 0.00 -0.01 506.1  
 1882.29 0.00 0.79 508.7 1881.60 0.00 -0.01 513.8 1882.29 0.00 0.69 522.0  
 1882.29 0.00 0.69 533.5 1881.63 0.00 0.03 543.7 1881.72 0.00 0.02 555.0  
 1881.72 0.00 0.02 558.9 1882.29 0.00 0.49 566.0 1882.35 0.00 0.55 573.0  
 1882.35 0.00 0.45 581.1 1882.35 0.00 0.45 594.1 1882.42 0.00 0.62 604.9  
 1882.84 0.00 0.00 610.0

## ID

18 SECTION 1700.00 TIME = 30.02 HRS WS = 1879.91 WIDTH = 36.7

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1882.00 0.00 0.00 524.0 1881.83 0.00 0.00 539.1 1880.65 0.00 -1.02 550.7  
 1880.64 0.00 -0.86 567.8 1880.64 0.00 -0.70 584.4 1880.64 0.00 -0.53 599.2  
 1880.63 0.00 -0.37 614.6 1880.63 0.00 -0.20 629.6 1880.63 0.00 -0.04 644.8  
 1880.63 0.00 0.13 660.0 1880.63 0.00 0.13 663.0 1880.63 0.00 0.13 665.0  
 1880.63 0.00 0.23 666.0 1880.63 0.00 0.33 672.0 1880.63 0.00 0.33 673.0  
 1880.63 0.00 0.32 675.0 1880.63 0.00 0.33 678.0 1880.63 0.00 0.43 682.0  
 1880.62 0.00 0.42 684.0 1880.62 0.00 0.43 688.0 1880.62 0.00 0.42 689.0  
 1880.62 0.00 0.42 690.0 1880.62 0.00 0.42 691.0 1880.62 0.00 0.42 697.0  
 1880.62 0.00 0.52 702.0 1880.62 0.00 0.52 706.0 1880.62 0.00 0.52 713.0  
 1880.64 0.00 0.64 717.8 1880.63 0.00 0.63 733.7 1878.72 0.03 -1.28 746.9  
 1878.72 0.03 -1.28 767.1 1880.46 0.00 0.26 779.0 1880.47 0.00 0.27 784.9  
 1880.48 0.00 0.28 789.0 1880.52 0.00 0.22 791.3 1881.50 0.00 1.19 793.0  
 1881.50 0.00 1.19 793.8 1881.50 0.00 1.09 795.9 1881.50 0.00 1.10 797.1  
 1881.89 0.00 0.00 800.0

## ID

17 SECTION 1600.00 TIME = 30.02 HRS WS = 1879.18 WIDTH = 38.6

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1881.30 0.00 0.00 496.0 1881.40 0.00 0.00 511.0 1881.40 0.00 0.00 513.0  
 1881.40 0.00 0.00 516.0 1881.40 0.00 0.00 520.0 1881.40 0.00 0.00 521.0  
 1881.40 0.00 0.00 523.0 1881.40 0.00 0.00 525.0 1881.40 0.00 0.00 526.0  
 1881.40 0.00 0.00 528.0 1881.30 0.00 0.00 538.0 1881.30 0.00 0.00 539.0  
 1881.30 0.00 0.00 541.0 1881.30 0.00 0.00 542.0 1881.30 0.00 0.00 545.0  
 1881.20 0.00 0.00 546.0 1881.20 0.00 0.00 548.0 1881.20 0.00 0.00 549.0  
 1881.20 0.00 0.00 550.0 1881.20 0.00 0.00 552.0 1881.20 0.00 0.00 553.0  
 1881.10 0.00 0.00 556.0 1881.10 0.00 0.00 559.0 1881.00 0.00 0.00 563.0  
 1881.00 0.00 0.00 564.0 1881.00 0.00 0.00 565.0 1880.90 0.00 0.00 566.0  
 1880.90 0.00 0.00 567.0 1880.80 0.00 0.00 571.0 1880.80 0.00 0.00 575.0  
 1880.80 0.00 0.00 578.0 1880.80 0.00 0.00 581.0 1879.58 0.00 -1.17 587.8  
 1879.57 0.00 -1.13 601.4 1879.57 0.00 -1.03 604.8 1879.57 0.00 -1.03 608.0  
 1879.57 0.00 -1.03 611.0 1879.57 0.00 -1.03 613.0 1879.57 0.00 -0.93 618.8  
 1879.57 0.00 -0.93 621.0 1879.57 0.00 -0.83 624.8 1879.57 0.00 -0.73 631.9  
 1879.57 0.00 -0.73 636.0 1879.57 0.00 -0.73 641.0 1879.57 0.00 -0.63 644.8  
 1879.57 0.00 -0.63 648.0 1879.57 0.00 -0.63 652.0 1879.57 0.00 -0.63 654.0  
 1879.57 0.00 -0.53 659.0 1879.57 0.00 -0.53 664.0 1879.57 0.00 -0.50 675.6  
 1879.57 0.00 -0.46 687.3 1879.57 0.00 -0.43 699.0 1879.57 0.00 -0.33 709.0  
 1879.57 0.00 -0.33 713.1 1879.57 0.00 -0.23 719.0 1879.57 0.00 -0.13 721.0

1879.57 0.00 0.04 737.6 1879.57 0.00 0.20 754.3 1878.15 -0.01 -1.05 769.9  
 1878.14 -0.02 -1.06 774.0 1878.14 -0.02 -1.06 776.0 1878.14 -0.02 -1.06 781.0  
 1878.13 -0.03 -1.07 782.0 1878.13 -0.03 -1.07 784.0 1878.13 -0.03 -1.07 786.0  
 1878.13 -0.03 -1.07 788.0 1878.13 -0.03 -1.07 791.0 1878.13 -0.03 -0.97 792.0  
 1878.12 -0.04 -0.98 794.0 1878.12 -0.04 -0.88 795.0 1878.12 -0.04 -0.88 796.0  
 1879.57 0.00 0.57 797.7 1880.72 0.00 1.72 798.9 1880.97 0.00 0.00 800.0

## ID

16 SECTION 1500.00 TIME = 30.02 HRS WS = 1878.33 WIDTH = 44.6

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1880.80 0.00 0.00 0.0 1880.80 0.00 0.00 6.0 1880.90 0.00 0.00 0.00 12.0  
 1880.90 0.00 0.00 17.0 1880.90 0.00 0.00 19.0 1880.90 0.00 0.00 0.00 24.0  
 1880.90 0.00 0.00 28.0 1880.90 0.00 0.00 32.0 1880.90 0.00 0.00 0.00 35.0  
 1881.00 0.00 0.00 49.0 1881.10 0.00 0.00 51.0 1881.10 0.00 0.00 0.00 55.0  
 1881.20 0.00 0.00 57.0 1881.20 0.00 0.00 59.0 1881.20 0.00 0.00 0.00 61.0  
 1881.20 0.00 0.00 63.0 1881.30 0.00 0.00 65.0 1881.30 0.00 0.00 0.00 67.0  
 1881.30 0.00 0.00 72.0 1881.30 0.00 0.00 79.0 1881.20 0.00 0.00 0.00 81.0  
 1881.20 0.00 0.00 83.0 1881.00 0.00 0.00 87.0 1881.00 0.00 0.00 0.00 90.0  
 1880.90 0.00 0.00 92.0 1880.80 0.00 0.00 97.0 1880.80 0.00 0.00 0.00 102.0  
 1880.70 0.00 0.00 105.0 1880.40 0.00 0.00 108.0 1880.19 0.00 -0.01 115.0  
 1880.14 0.00 0.00 131.0 1880.07 0.00 0.00 147.0 1878.62 0.00 -1.38 159.0  
 1880.40 0.00 0.00 172.0 1880.70 0.00 0.00 179.0 1881.00 0.00 0.00 0.00 185.0  
 1881.20 0.00 0.00 188.0 1881.20 0.00 0.00 190.0 1881.20 0.00 0.00 0.00 195.0  
 1881.20 0.00 0.00 201.0 1881.30 0.00 0.00 216.1 1881.40 0.00 0.00 0.00 231.2  
 1881.50 0.00 0.00 246.4 1881.60 0.00 0.00 261.5 1881.70 0.00 0.00 0.00 276.6  
 1881.80 0.00 0.00 291.8 1881.90 0.00 0.00 306.9 1882.00 0.00 0.00 0.00 322.0  
 1880.80 0.00 0.00 331.0 1878.24 -0.03 -1.76 335.0 1878.58 0.00 -0.87 354.6  
 1878.57 0.00 -0.33 369.7 1878.57 0.00 -0.33 380.1 1878.57 0.00 -0.43 384.0  
 1878.57 0.00 -0.43 386.0 1878.57 0.00 -0.43 389.0 1878.57 0.00 -0.44 395.0  
 1878.56 0.00 -0.34 404.9 1878.56 0.00 -0.24 407.9 1878.56 0.00 -0.14 410.9  
 1878.56 0.00 0.16 416.7 1878.56 0.00 0.45 423.0 1878.55 0.00 0.50 438.3  
 1877.25 0.05 -0.75 452.8 1877.25 0.04 -1.15 461.2 1877.25 0.03 -1.70 475.7  
 1879.62 0.00 0.12 482.2 1879.62 0.00 -0.18 488.4 1878.14 -0.03 -1.86 501.5  
 1880.18 0.00 -0.02 521.3 1880.40 0.00 0.00 538.0 1880.30 0.00 0.00 0.00 545.0  
 1880.30 0.00 0.00 552.0 1880.18 0.00 -0.02 563.0 1880.19 0.00 -0.01 568.0  
 1880.19 0.00 -0.01 574.0 1880.09 0.00 -0.01 583.0 1880.09 0.00 -0.01 590.0  
 1880.09 0.00 -0.01 599.0 1880.09 0.00 -0.01 609.0 1878.37 0.00 -1.73 617.3  
 1878.59 0.00 -1.41 620.8 1879.62 0.00 -0.23 640.8 1879.62 0.00 -0.08 657.3  
 1879.62 0.00 0.07 673.3 1879.62 0.00 0.22 689.5 1879.62 0.00 0.37 705.8  
 1879.62 0.00 0.52 722.5 1879.95 0.00 0.85 723.8 1880.43 0.00 0.00 728.0

## ID

15 SECTION 1400.00 TIME = 30.02 HRS WS = 1877.41 WIDTH = 65.1

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1880.30 0.00 0.00 233.0 1880.30 0.00 0.00 237.0 1880.20 0.00 0.00 0.00 243.0  
 1880.20 0.00 0.00 247.0 1880.20 0.00 0.00 255.0 1880.30 0.00 0.00 0.00 260.0  
 1880.40 0.00 0.00 270.0 1880.30 0.00 0.00 272.0 1880.30 0.00 0.00 0.00 275.0  
 1880.30 0.00 0.00 277.0 1880.10 0.00 0.00 282.0 1880.10 0.00 0.00 0.00 285.0  
 1880.10 0.00 0.00 290.0 1880.10 0.00 0.00 294.0 1880.00 0.00 0.00 0.00 298.0  
 1879.90 0.00 0.00 303.0 1879.70 0.00 0.00 313.0 1879.80 0.00 0.00 0.00 317.0  
 1880.00 0.00 0.00 321.0 1880.10 0.00 0.00 324.0 1880.10 0.00 0.00 0.00 330.0  
 1880.10 0.00 0.00 336.0 1879.80 0.00 0.00 342.0 1877.68 0.00 -1.62 349.0  
 1876.91 0.00 -1.09 350.1 1876.86 0.00 -1.04 364.0 1876.83 0.00 -0.97 369.0  
 1876.81 0.00 -0.89 373.0 1876.80 0.00 -0.80 375.0 1876.86 0.00 -0.64 378.0  
 1876.77 -0.01 -0.73 395.0 1876.67 -0.01 -0.73 400.0 1876.54 -0.01 -0.86 406.9  
 1876.97 0.00 -0.43 410.6 1877.10 0.00 -0.40 414.0 1877.80 0.00 0.30 415.0  
 1878.31 0.00 0.74 429.6 1878.31 0.00 0.66 443.5 1878.31 0.00 0.59 457.8  
 1878.31 0.00 0.51 472.0 1878.31 0.00 0.51 479.0 1878.31 0.00 0.41 482.0

1878.31 0.00 0.31 486.1 1878.31 0.00 0.12 492.3 1878.31 0.00 -0.08 499.1  
 1878.31 0.00 -0.18 501.3 1878.32 0.00 -0.38 506.2 1878.31 0.00 -0.49 509.3  
 1878.31 0.00 -0.59 511.2 1878.31 0.00 -0.69 515.0 1878.32 0.00 -0.68 519.5  
 1877.84 0.00 -1.26 520.9 1878.32 0.00 -0.88 525.5 1878.19 0.00 -1.11 527.4  
 1879.40 0.00 0.00 530.0 1879.40 0.00 0.00 533.0 1879.30 0.00 0.00 535.0  
 1878.94 0.00 -0.36 537.0 1878.32 0.00 -0.88 537.9 1878.32 0.00 -0.78 539.7  
 1878.32 0.00 -0.68 542.5 1878.31 0.00 -0.59 551.0 1878.31 0.00 -0.49 556.7  
 1878.31 0.00 -0.39 560.8 1878.32 0.00 -0.28 562.9 1878.31 0.00 -0.09 573.7  
 1878.32 0.00 0.22 586.6 1878.32 0.00 0.22 604.2 1878.31 0.00 -0.09 606.3  
 1878.32 0.00 -0.28 608.1 1878.34 0.00 -0.46 614.1 1879.20 0.00 0.00 628.0  
 1879.20 0.00 0.00 630.0 1879.20 0.00 0.00 633.0 1879.20 0.00 0.00 636.0  
 1879.20 0.00 0.00 639.0 1879.20 0.00 0.00 641.0 1879.30 0.00 0.00 644.0  
 1879.30 0.00 0.00 647.0 1879.30 0.00 0.00 649.0 1879.30 0.00 0.00 652.0  
 1879.30 0.00 0.00 656.0 1879.30 0.00 0.00 658.0 1879.30 0.00 0.00 662.0  
 1879.20 0.00 0.00 672.0 1879.20 0.00 0.00 674.0 1879.20 0.00 0.00 678.0  
 1879.20 0.00 0.00 680.0 1879.10 0.00 0.00 686.0 1879.10 0.00 0.00 691.0  
 1879.10 0.00 0.00 698.0 1879.10 0.00 0.00 703.0 1879.27 0.00 0.00 705.0

## ID

14 SECTION 1300.00 TIME = 30.02 HRS WS = 1876.51 WIDTH = 69.6

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1879.30 0.00 0.00 300.0 1879.40 0.00 0.00 302.0 1879.40 0.00 0.00 305.0  
 1879.40 0.00 0.00 307.0 1879.30 0.00 0.00 309.0 1879.30 0.00 0.00 311.0  
 1879.20 0.00 0.00 313.0 1879.10 0.00 0.00 315.0 1878.80 0.00 0.00 317.0  
 1878.70 0.00 0.00 325.0 1878.50 0.00 0.00 332.0 1877.21 0.00 -0.99 338.6  
 1876.98 0.00 -0.92 346.6 1876.97 0.00 -0.63 360.9 1876.96 0.00 -0.44 365.9  
 1876.96 0.00 -0.34 372.7 1876.18 0.00 -0.92 378.6 1876.12 0.00 -0.98 383.0  
 1876.11 0.00 -0.79 387.8 1876.11 0.00 -0.80 390.9 1876.10 0.00 -0.70 393.9  
 1876.11 0.00 -0.59 396.8 1876.00 -0.01 -0.70 400.0 1875.93 -0.01 -0.67 402.0  
 1875.89 -0.01 -0.61 404.0 1875.78 -0.01 -0.72 412.0 1875.73 -0.01 -0.77 415.0  
 1875.73 -0.01 -0.77 418.0 1875.87 -0.01 -0.68 427.5 1876.14 0.00 -0.46 437.2  
 1876.24 0.00 -0.46 440.7 1875.74 0.00 -0.96 444.6 1876.67 0.00 -0.03 445.9  
 1877.51 0.00 0.71 449.9 1877.52 0.00 0.72 453.9 1877.51 0.00 0.71 471.0  
 1877.51 0.00 0.72 475.0 1877.52 0.00 0.71 478.0 1877.52 0.00 0.62 482.0  
 1877.52 0.00 0.62 486.0 1877.52 0.00 0.52 491.0 1877.52 0.00 0.52 493.0  
 1877.52 0.00 0.42 499.0 1877.52 0.00 0.42 502.9 1877.52 0.00 0.32 508.1  
 1877.52 0.00 0.22 512.0 1877.52 0.00 0.17 524.5 1877.52 0.00 0.12 537.0  
 1877.52 0.00 0.22 539.0 1877.52 0.00 0.22 542.0 1877.53 0.00 0.23 546.1  
 1877.53 0.00 -0.12 559.6 1876.53 0.00 -1.47 573.5 1878.20 0.00 0.30 577.0  
 1877.23 0.00 -0.47 590.4 1877.53 0.00 -0.07 599.9 1877.53 0.00 -0.07 604.0  
 1877.53 0.00 -0.07 608.0 1877.53 0.00 0.03 610.8 1877.53 0.00 0.03 617.1  
 1877.53 0.00 -0.07 628.0 1877.53 0.00 -0.07 633.0 1877.53 0.00 -0.07 638.0  
 1877.53 0.00 -0.17 642.0 1877.53 0.00 -0.17 650.0 1877.54 0.00 -0.26 657.0  
 1877.58 0.00 -0.22 664.4 1878.24 0.00 0.34 671.0 1878.24 0.00 0.34 680.0  
 1878.24 0.00 0.34 685.0 1878.24 0.00 0.34 692.0 1878.24 0.00 0.34 694.0  
 1878.24 0.00 0.34 697.0 1878.24 0.00 0.34 701.0 1878.24 0.00 0.34 709.0  
 1878.24 0.00 0.34 713.0 1878.24 0.00 0.34 717.0 1878.50 0.00 0.00 722.0

## ID

13 SECTION 1200.00 TIME = 30.02 HRS WS = 1875.51 WIDTH = 76.5

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1877.61 0.00 0.00 251.0 1877.50 0.00 0.00 255.0 1877.50 0.00 0.00 259.0  
 1877.60 0.00 0.00 267.0 1877.73 0.00 0.00 280.7 1877.87 0.00 0.00 294.3  
 1878.00 0.00 0.00 308.0 1878.10 0.00 0.00 313.0 1878.20 0.00 0.00 319.0  
 1878.20 0.00 0.00 326.0 1878.10 0.00 0.00 331.0 1878.00 0.00 0.00 335.0  
 1875.84 0.00 -1.31 344.8 1875.83 0.00 -0.47 358.5 1875.83 0.00 -0.07 369.0  
 1875.83 0.00 -0.07 374.0 1875.42 0.00 -0.38 378.6 1875.42 0.00 -0.28 382.0  
 1875.41 0.00 -0.19 385.0 1875.41 0.00 -0.09 387.0 1875.42 0.01 0.02 392.0

1875.13 0.02 -0.17 400.0 1875.04 0.02 -0.26 403.0 1874.65 0.02 -0.65 414.0  
 1874.63 0.02 -0.67 416.0 1874.42 0.03 -0.88 422.0 1874.42 0.01 -0.98 425.9  
 1875.21 0.00 -0.49 429.2 1874.42 0.01 -1.34 447.4 1876.68 0.00 0.85 461.3  
 1876.68 0.00 0.78 477.5 1876.68 0.00 0.72 493.8 1875.84 0.00 -0.20 508.7  
 1877.08 0.00 0.99 526.1 1877.03 0.00 0.63 531.2 1877.21 0.00 0.66 542.7  
 1877.22 0.00 0.52 554.0 1876.41 0.00 -0.14 561.1 1876.69 0.00 0.29 572.9  
 1876.69 0.00 0.29 577.0 1876.69 0.00 0.39 579.0 1876.69 0.00 0.39 582.0  
 1876.71 0.00 0.41 584.0 1876.74 0.00 0.44 589.5 1877.09 0.00 0.79 591.0  
 1877.09 0.00 0.78 594.0 1877.09 0.00 0.69 597.0 1877.08 0.00 0.68 604.0  
 1877.09 0.00 0.59 608.0 1877.09 0.00 0.59 612.1 1877.08 0.00 0.48 615.0  
 1877.09 0.00 0.49 618.0 1877.08 0.00 0.48 622.0 1877.08 0.00 0.38 624.0  
 1877.08 0.00 0.38 627.0 1877.08 0.00 0.38 630.0 1877.09 0.00 0.39 633.1  
 1877.20 0.00 0.50 635.0 1877.20 0.00 0.50 640.0 1877.21 0.00 0.51 645.0  
 1877.21 0.00 0.51 650.0 1877.21 0.00 0.51 653.1 1877.21 0.00 0.41 658.0  
 1877.22 0.00 0.52 661.9 1877.22 0.00 0.52 667.0 1877.22 0.00 0.52 672.0  
 1877.22 0.00 0.52 678.0 1877.23 0.00 0.53 686.0 1877.24 0.00 0.54 688.0  
 1877.24 0.00 0.54 691.1 1877.28 0.00 0.48 694.3 1877.28 0.00 0.38 696.0  
 1877.26 0.00 0.26 698.0 1877.26 0.00 0.26 700.0 1877.26 0.00 0.16 702.0  
 1877.26 0.00 0.16 705.0 1877.26 0.00 0.16 707.0 1877.26 0.00 0.16 712.0  
 1877.26 0.00 0.16 721.0 1877.27 0.00 0.17 725.0 1877.27 0.00 0.17 732.9  
 1877.28 0.00 0.18 745.0 1877.34 0.00 0.24 747.0 1877.36 0.00 0.26 750.9  
 1877.61 0.00 0.00 753.0

ID  
 12 SECTION 1100.00 TIME = 30.02 HRS WS = 1874.37 WIDTH = 78.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1876.54	0.00	0.00	231.0	1876.55	0.00	0.00	245.5	1876.60	0.00	0.00	260.0
1876.60	0.00	0.00	266.0	1876.50	0.00	0.00	269.0	1876.50	0.00	0.00	277.0
1876.50	0.00	0.00	284.0	1876.50	0.00	0.00	289.0	1876.50	0.00	0.00	293.0
1876.50	0.00	0.00	297.0	1876.20	0.00	-0.10	302.9	1876.40	0.00	0.00	305.0
1876.50	0.00	0.00	309.0	1876.50	0.00	0.00	312.0	1876.50	0.00	0.00	314.0
1876.20	0.00	-0.10	324.9	1874.46	0.00	-1.64	331.4	1874.36	0.00	-1.34	350.5
1874.28	0.00	-1.02	367.0	1874.17	0.00	-0.73	382.9	1874.01	-0.01	-0.49	399.0
1873.38	-0.03	-0.92	408.0	1872.54	-0.07	-1.56	420.9	1876.09	0.00	1.99	432.0
1876.09	0.00	1.78	437.0	1876.09	0.00	1.59	440.0	1876.09	0.00	1.49	444.4
1876.09	0.00	1.79	458.0	1876.08	0.00	1.88	465.0	1876.08	0.00	1.89	470.0
1876.09	0.00	1.89	472.0	1876.09	0.00	1.69	478.0	1876.09	0.00	1.59	480.0
1876.09	0.00	1.59	483.0	1876.09	0.00	1.50	486.0	1876.09	0.00	1.39	489.0
1876.09	0.00	1.29	492.9	1876.09	0.00	1.18	507.4	1876.09	0.00	1.06	521.7
1876.10	0.00	0.95	536.2	1876.09	0.00	0.83	550.5	1876.10	0.00	0.71	564.8
1876.10	0.00	0.60	579.0	1876.09	0.00	0.69	584.0	1876.10	0.00	0.70	587.0
1876.10	0.00	0.80	589.9	1876.10	0.00	0.80	603.1	1876.10	0.00	0.70	606.0
1876.10	0.00	0.60	608.9	1876.10	0.00	0.60	613.0	1876.10	0.00	0.59	619.0
1876.10	0.00	0.70	627.0	1876.10	0.00	0.70	631.8	1876.10	0.00	0.60	634.0
1876.10	0.00	0.60	638.0	1876.10	0.00	0.60	641.0	1876.10	0.00	0.60	646.1
1876.10	0.00	0.45	655.3	1876.11	0.00	0.30	664.4	1876.11	0.00	0.21	666.4
1876.10	0.00	0.10	669.2	1876.10	0.00	0.00	671.0	1876.10	0.00	0.00	674.2
1876.11	0.00	-0.09	678.0	1876.13	0.00	-0.07	682.7	1876.31	0.00	0.01	685.0
1876.31	0.00	0.01	688.0	1876.31	0.00	0.01	694.0	1876.31	0.00	0.01	697.0
1876.31	0.00	0.01	702.0	1876.54	0.00	0.00	704.0				

ID  
 11 SECTION 1000.00 TIME = 30.02 HRS WS = 1872.94 WIDTH = 41.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1875.45	0.00	0.00	0.0	1874.94	0.00	0.44	3.6	1874.90	0.00	0.50	9.9
1874.90	0.00	0.50	16.0	1874.90	0.00	0.60	18.0	1874.90	0.00	0.60	21.0
1874.90	0.00	0.60	23.0	1874.91	0.00	0.61	27.0	1874.90	0.00	0.60	31.0
1874.90	0.00	0.70	40.0	1874.90	0.00	0.70	47.0	1874.74	0.00	0.64	56.0

1874.30 0.00 0.25 72.0 1872.20 0.01 -1.80 85.3 1872.11 0.04 -1.79 103.0  
 1872.06 0.04 -1.84 109.0 1871.90 0.02 -2.00 116.1 1873.11 0.00 -0.69 123.0  
 1873.10 0.00 -0.79 138.0 1873.11 0.00 -0.89 140.0 1873.14 0.00 -0.96 144.0  
 1873.12 0.00 -1.08 148.0 1873.16 0.00 -1.14 157.6 1875.00 0.00 0.50 164.0  
 1874.61 0.00 0.21 175.9 1874.67 0.00 0.37 188.0 1874.70 0.00 0.50 192.0  
 1874.74 0.00 0.54 197.0 1874.81 0.00 0.41 207.1 1874.66 0.00 0.16 211.4  
 1875.00 0.00 0.40 213.0 1875.00 0.00 0.40 215.0 1875.02 0.00 0.32 218.0  
 1875.02 0.00 0.32 222.0 1875.02 0.00 0.42 233.0 1875.01 0.00 0.41 238.0  
 1875.01 0.00 0.41 244.0 1875.01 0.00 0.41 249.0 1875.02 0.00 0.32 251.0  
 1875.01 0.00 0.31 253.0 1874.96 0.00 0.16 255.9 1875.01 0.00 0.11 260.0  
 1875.01 0.00 0.11 263.1 1874.79 0.00 -0.21 266.7 1874.90 0.00 -0.20 273.5  
 1875.20 0.00 0.00 276.0 1875.14 0.00 -0.06 280.0 1875.30 0.00 0.00 284.0  
 1875.30 0.00 0.00 290.0 1875.40 0.00 0.00 294.0 1875.40 0.00 0.00 296.0  
 1875.50 0.00 0.00 298.0 1875.50 0.00 0.00 301.0 1875.60 0.00 0.00 303.0  
 1875.60 0.00 0.00 305.0 1875.60 0.00 0.00 307.0 1875.70 0.00 0.00 309.0  
 1875.70 0.00 0.00 311.0 1875.70 0.00 0.00 314.0 1875.60 0.00 0.00 317.0  
 1875.60 0.00 0.00 322.0 1875.70 0.00 0.00 325.0 1875.60 0.00 0.00 327.0  
 1875.50 0.00 0.00 329.0 1875.50 0.00 0.00 331.0 1875.50 0.00 0.00 333.0  
 1875.40 0.00 0.00 336.0 1875.40 0.00 0.00 340.0 1875.30 0.00 0.00 344.0  
 1875.40 0.00 0.00 347.0 1875.30 0.00 0.00 351.0 1875.14 0.00 -0.06 352.9  
 1874.94 0.00 -0.16 355.5 1874.91 0.00 -0.09 359.4 1875.03 0.00 0.13 366.9  
 1875.03 0.00 0.23 370.8 1875.03 0.00 0.23 373.0 1875.03 0.00 0.33 379.0  
 1875.04 0.00 0.44 385.0 1875.02 0.00 0.62 391.4 1875.02 0.00 0.62 396.0  
 1875.03 0.00 0.83 404.5 1875.04 0.00 0.86 420.8 1875.04 0.00 0.88 436.6  
 1875.03 0.00 0.89 452.4 1875.03 0.00 0.91 468.2 1875.03 0.00 0.93 484.0  
 1875.05 0.00 0.84 487.0 1875.03 0.00 0.73 490.0 1875.03 0.00 0.63 493.1  
 1875.05 0.00 0.45 496.0 1875.05 0.00 0.35 504.0 1875.05 0.00 0.35 506.0  
 1875.05 0.00 0.25 508.0 1875.05 0.00 0.25 510.0 1875.05 0.00 0.25 514.0  
 1875.04 0.00 0.24 517.0 1875.04 0.00 0.24 523.0 1875.05 0.00 0.25 526.2  
 1875.04 0.00 0.14 530.0 1875.05 0.00 0.15 533.0 1875.05 0.00 0.15 535.1  
 1875.05 0.00 0.05 538.0 1875.05 0.00 0.05 541.0 1875.04 0.00 -0.06 548.0  
 1875.04 0.00 -0.06 551.0 1875.04 0.00 -0.06 554.0 1875.04 0.00 -0.06 560.0  
 1875.04 0.00 -0.06 563.0 1875.04 0.00 -0.06 568.0 1875.05 0.00 0.05 571.7  
 1875.04 0.00 0.04 576.0 1875.04 0.00 0.14 577.9 1875.05 0.00 0.15 581.0  
 1875.05 0.00 0.25 583.8 1875.04 0.00 0.24 587.0 1875.04 0.00 0.24 589.0  
 1875.04 0.00 0.34 595.0 1875.04 0.00 0.44 598.0 1875.04 0.00 0.54 601.0  
 1875.04 0.00 0.64 603.9 1875.04 0.00 0.74 608.0 1875.04 0.00 0.84 612.0  
 1875.04 0.00 0.84 617.0 1875.04 0.00 0.94 621.0 1875.04 0.00 0.94 627.0  
 1875.04 0.00 0.94 632.0 1875.04 0.00 0.84 637.0 1875.04 0.00 0.74 643.0  
 1875.04 0.00 0.74 649.1 1875.05 0.00 0.55 656.0 1875.05 0.00 0.45 660.0  
 1875.04 0.00 0.34 663.0 1875.05 0.00 0.35 668.0 1875.04 0.00 0.34 672.0  
 1875.05 0.00 0.25 675.0 1875.05 0.00 0.25 677.0 1875.05 0.00 0.25 688.5  
 1875.04 0.00 0.24 700.0 1875.05 0.00 0.15 703.0 1875.05 0.00 0.15 707.0  
 1875.04 0.00 0.04 711.0 1875.06 0.00 0.06 715.0 1875.14 0.00 0.04 719.3  
 1875.20 0.00 0.00 721.0 1875.20 0.00 0.00 724.0 1875.20 0.00 0.00 728.0  
 1875.15 0.00 -0.05 732.0 1875.30 0.00 0.00 736.0 1875.30 0.00 0.00 739.0  
 1875.30 0.00 0.00 744.0 1875.30 0.00 0.00 747.0 1875.30 0.00 0.00 757.0  
 1875.16 0.00 -0.04 759.9 1875.20 0.00 0.00 764.0 1875.20 0.00 0.00 772.0  
 1875.18 0.00 -0.02 776.0 1875.30 0.00 0.00 778.0 1875.30 0.00 0.00 784.0  
 1875.30 0.00 0.00 790.0 1875.20 0.00 0.00 795.0 1875.24 0.00 0.04 798.0  
 1875.45 0.00 0.00 800.0

ID  
 10 SECTION 900.00 TIME = 30.02 HRS WS =1871.93 WIDTH = 62.0

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1874.42 0.00 0.00 0.0 1874.14 0.00 0.64 4.9 1874.13 0.00 0.62 13.1  
 1874.10 0.00 0.70 15.9 1874.05 0.00 0.65 20.0 1874.02 0.00 0.72 25.0  
 1874.02 0.00 0.72 29.0 1874.02 0.00 0.82 34.0 1874.02 0.00 0.82 38.0  
 1874.01 0.00 0.81 42.0 1874.01 0.00 0.91 44.0 1874.01 0.00 0.91 47.0  
 1874.01 0.00 0.91 50.0 1874.01 0.00 1.01 55.0 1874.01 0.00 1.12 57.0

1874.01 0.00 1.21 60.0 1874.01 0.00 1.21 62.0 1874.00 0.00 1.21 67.0  
 1874.00 0.00 1.20 71.0 1874.00 0.00 1.20 73.0 1873.94 0.00 1.24 76.0  
 1873.93 0.00 1.23 81.0 1873.91 0.00 1.21 94.0 1873.90 0.00 1.30 96.1  
 1873.89 0.00 1.19 102.0 1873.89 0.00 1.19 105.0 1873.97 0.00 1.17 108.0  
 1874.01 0.00 1.11 114.0 1874.00 0.00 1.00 117.0 1874.00 0.00 0.90 121.1  
 1874.00 0.00 0.70 127.0 1874.00 0.00 0.60 134.3 1873.99 0.00 0.39 141.2  
 1874.00 0.00 0.19 152.2 1874.00 0.00 0.10 165.2 1873.99 0.00 -0.01 178.0  
 1873.23 0.00 -0.47 186.0 1873.99 0.00 0.39 190.9 1873.74 0.00 0.44 193.7  
 1873.97 0.00 0.77 196.0 1873.99 0.00 0.79 206.0 1873.98 0.00 0.78 216.0  
 1873.98 0.00 0.68 220.0 1873.98 0.00 0.68 223.0 1873.98 0.00 0.58 227.1  
 1873.98 0.00 0.48 232.1 1873.94 0.00 0.34 237.2 1873.87 0.00 0.07 244.3  
 1873.98 0.00 -0.02 251.2 1873.91 0.00 -0.19 255.2 1874.19 0.00 -0.01 261.0  
 1874.17 0.00 -0.03 266.0 1874.30 0.00 0.00 268.0 1874.40 0.00 0.00 273.0  
 1874.30 0.00 0.00 281.0 1874.17 0.00 -0.03 288.0 1873.90 0.00 -0.20 291.8  
 1873.96 0.00 -0.04 293.8 1873.96 0.00 0.06 296.9 1873.96 0.00 0.16 300.8  
 1873.96 0.00 0.26 305.8 1873.82 0.00 0.22 313.1 1873.94 0.00 0.14 323.2  
 1873.96 0.00 0.06 325.0 1873.96 0.00 0.16 329.8 1873.94 0.00 0.24 335.8  
 1873.70 0.00 0.20 340.8 1873.95 0.00 0.45 343.0 1873.09 0.00 -0.22 350.0  
 1873.01 0.00 -0.09 356.9 1872.99 0.00 0.09 360.9 1872.99 0.00 0.08 363.0  
 1872.96 0.00 0.06 367.0 1872.83 0.00 0.03 369.0 1872.82 0.00 0.02 372.0  
 1872.77 0.00 -0.03 374.0 1872.94 0.00 0.04 377.0 1872.95 0.00 0.05 380.0  
 1872.82 0.00 -0.08 382.1 1872.95 0.00 -0.05 386.0 1872.75 0.00 -0.15 389.9  
 1872.91 0.00 -0.09 393.0 1872.65 0.00 -0.25 395.0 1870.87 -0.02 -1.93 398.7  
 1870.85 -0.02 -1.95 403.0 1870.86 -0.02 -1.84 405.0 1870.85 -0.02 -1.85 410.0  
 1871.22 0.00 -1.38 412.0 1871.41 0.00 -1.24 423.5 1871.44 0.00 -1.27 435.0  
 1871.43 0.00 -1.27 440.0 1871.43 0.00 -1.36 442.0 1871.40 0.00 -1.40 447.9  
 1872.19 -0.01 -0.71 449.0 1871.44 -0.02 -1.65 460.2 1873.85 0.00 0.55 474.0  
 1872.76 0.00 -0.24 480.2 1873.15 0.00 0.15 486.0 1873.17 0.00 0.17 487.9  
 1873.19 0.00 0.19 490.9 1873.23 0.00 0.23 493.5 1873.59 0.00 0.49 495.0  
 1873.73 0.00 0.63 498.0 1873.83 0.00 0.73 501.0 1873.90 0.00 0.70 504.0  
 1873.90 0.00 0.60 509.0 1873.91 0.00 0.51 516.1 1873.93 0.00 0.43 524.2  
 1874.10 0.00 0.40 531.1 1874.07 0.00 0.27 538.2 1874.12 0.00 0.22 545.0  
 1874.12 0.00 0.22 548.0 1874.07 0.00 0.17 553.1 1874.15 0.00 0.15 559.0  
 1874.07 0.00 0.07 563.1 1874.13 0.00 0.03 567.0 1874.13 0.00 0.03 571.0  
 1874.13 0.00 0.03 574.0 1874.12 0.00 0.07 588.4 1874.12 0.00 0.12 602.9  
 1874.12 0.00 0.22 607.8 1874.12 0.00 0.21 623.7 1874.12 0.00 0.19 639.3  
 1874.12 0.00 0.17 655.0 1874.12 0.00 0.16 670.7 1874.12 0.00 0.14 686.4  
 1874.15 0.00 0.15 702.0 1874.08 0.00 0.08 705.1 1874.13 0.00 0.03 714.0  
 1874.06 0.00 -0.04 721.1 1874.19 0.00 -0.01 736.0 1874.19 0.00 -0.01 741.0  
 1874.19 0.00 -0.01 743.0 1874.09 0.00 -0.01 748.8 1874.13 0.00 0.13 754.8  
 1874.13 0.00 0.13 759.1 1874.13 0.00 0.03 769.0 1874.14 0.00 0.14 773.8  
 1874.16 0.00 0.16 783.5 1874.17 0.00 0.17 793.0 1874.17 0.00 0.17 795.0  
 1874.42 0.00 0.00 799.0

ID  
 9 SECTION 800.00 TIME = 30.02 HRS WS = 1870.94 WIDTH = 61.8

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1873.30 0.00 0.00 0.0 1872.26 0.00 0.46 3.5 1869.81 0.00 -1.99 6.1  
 1870.17 0.00 -1.62 23.0 1870.23 0.00 -1.77 26.0 1870.51 0.00 -1.49 42.3  
 1870.56 0.00 -1.44 59.4 1871.37 0.00 -0.63 75.1 1871.38 0.00 -0.62 91.6  
 1871.53 0.00 -0.47 108.7 1872.06 0.00 0.06 124.5 1872.26 0.00 0.26 140.9  
 1872.29 0.00 0.19 149.0 1872.33 0.00 0.13 152.0 1872.36 0.00 0.18 166.5  
 1872.37 0.00 0.22 181.0 1872.38 0.00 0.25 195.5 1872.45 0.00 0.35 209.9  
 1872.50 0.00 0.30 215.2 1872.41 0.00 0.01 221.3 1872.87 0.00 0.27 229.1  
 1872.87 0.00 0.17 236.0 1872.87 0.00 0.17 245.1 1872.43 0.00 -0.37 248.9  
 1872.86 0.00 -0.04 251.1 1872.87 0.00 -0.13 254.0 1872.87 0.00 -0.13 257.1  
 1873.09 0.00 -0.01 259.0 1872.87 0.00 -0.13 261.9 1872.86 0.00 -0.04 263.9  
 1872.50 0.00 -0.30 265.7 1872.87 0.00 0.07 270.0 1872.50 0.00 -0.30 272.0  
 1872.58 0.00 -0.32 274.4 1873.01 0.00 -0.09 275.0 1873.09 0.00 -0.01 277.0  
 1873.09 0.00 -0.01 282.0 1873.20 0.00 0.00 289.0 1873.09 0.00 -0.01 292.0

1872.87 0.00 -0.13 293.9 1872.87 0.00 -0.13 296.0 1872.86 0.00 -0.04 298.9  
 1872.87 0.00 -0.03 302.0 1872.51 0.00 -0.29 305.6 1872.87 0.00 0.17 310.9  
 1872.87 0.00 0.27 315.9 1872.59 0.00 0.29 322.7 1872.87 0.00 0.60 339.5  
 1872.87 0.00 0.63 356.0 1872.87 0.00 0.66 372.5 1872.87 0.00 0.69 389.0  
 1872.87 0.00 0.72 405.5 1872.87 0.00 0.75 422.0 1872.87 0.00 0.78 438.5  
 1872.87 0.00 0.81 455.0 1872.86 0.00 0.83 471.5 1872.86 0.00 0.86 488.0  
 1872.87 0.00 0.77 493.0 1872.87 0.00 0.67 499.0 1872.87 0.00 0.57 503.0  
 1872.87 0.00 0.57 507.0 1872.87 0.00 0.47 511.0 1872.87 0.00 0.47 513.1  
 1872.87 0.00 0.37 517.0 1872.87 0.00 0.37 525.0 1872.87 0.00 0.47 526.9  
 1872.87 0.00 0.47 534.0 1872.87 0.00 0.47 536.0 1872.87 0.00 0.47 542.1  
 1872.87 0.00 0.37 545.0 1872.87 0.00 0.37 547.0 1872.87 0.00 0.27 550.1  
 1872.87 0.00 0.17 552.0 1872.87 0.00 0.17 555.0 1872.87 0.00 0.17 557.1  
 1872.87 0.00 0.07 559.0 1872.87 0.00 0.07 563.0 1872.86 0.00 0.06 570.2  
 1872.85 0.00 -0.05 572.1 1872.87 0.00 -0.13 575.0 1872.85 0.00 -0.05 577.9  
 1872.87 0.00 -0.13 583.0 1872.87 0.00 -0.13 586.1 1873.09 0.00 -0.01 589.0  
 1873.20 0.00 0.00 591.0 1873.20 0.00 0.00 594.0 1873.20 0.00 0.00 598.0  
 1873.09 0.00 -0.01 600.0 1872.60 0.00 -0.30 601.6 1872.87 0.00 -0.03 604.0  
 1872.86 0.00 0.06 605.8 1872.87 0.00 0.17 607.9 1872.87 0.00 0.27 609.9  
 1872.87 0.00 0.37 612.0 1872.87 0.00 0.47 613.9 1872.87 0.00 0.47 616.0  
 1872.87 0.00 0.57 618.0 1872.87 0.00 0.67 621.0 1872.87 0.00 0.67 625.0  
 1872.87 0.00 0.67 628.0 1872.87 0.00 0.77 633.0 1872.87 0.00 0.67 640.0  
 1872.87 0.00 0.67 646.0 1872.87 0.00 0.57 651.0 1872.87 0.00 0.67 654.0  
 1872.87 0.00 0.67 658.0 1872.87 0.00 0.57 668.0 1872.87 0.00 0.57 671.0  
 1872.87 0.00 0.47 675.0 1872.87 0.00 0.37 681.0 1872.87 0.00 0.27 686.0  
 1872.87 0.00 0.17 697.0 1872.87 0.00 0.07 700.0 1872.86 0.00 0.07 704.2  
 1872.87 0.00 -0.03 710.0 1872.87 0.00 -0.03 715.1 1872.87 0.00 -0.13 717.0  
 1872.87 0.00 -0.13 720.0 1872.87 0.00 -0.13 723.0 1872.87 0.00 -0.03 725.9  
 1872.87 0.00 -0.03 729.0 1872.87 0.00 -0.03 731.0 1872.87 0.00 -0.03 736.0  
 1872.87 0.00 -0.03 738.0 1872.86 0.00 0.07 739.8 1872.87 0.00 0.07 746.0  
 1872.87 0.00 0.07 751.0 1872.87 0.00 0.07 760.1 1872.87 0.00 -0.03 764.0  
 1872.87 0.00 -0.03 767.0 1872.87 0.00 -0.03 771.0 1872.87 0.00 -0.13 777.1  
 1873.09 0.00 -0.01 780.0 1873.20 0.00 0.00 784.0 1873.20 0.00 0.00 786.0  
 1873.20 0.00 0.00 793.0 1873.30 0.00 0.00 797.0

ID  
 8 SECTION 700.00 TIME = 30.02 HRS WS = 1869.92 WIDTH = 62.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1872.52	0.00	0.00	0.0	1871.16	0.00	0.46	1.6	1869.55	0.00	-1.15	3.1
1869.00	0.00	-1.80	11.0	1869.06	0.00	-1.75	14.0	1869.09	0.00	-1.72	18.0
1869.26	0.00	-1.64	31.0	1869.32	0.00	-1.58	36.0	1869.40	0.00	-1.50	43.0
1869.43	0.00	-1.47	47.0	1869.48	0.00	-1.43	53.0	1869.78	0.00	-1.12	64.6
1870.08	0.00	-0.91	66.2	1870.75	0.00	-0.25	70.0	1870.81	0.00	-0.19	73.0
1870.88	0.00	-0.12	76.0	1870.94	0.00	-0.06	79.0	1870.64	0.00	-0.26	80.9
1870.86	0.00	-0.04	83.9	1871.01	0.00	0.11	86.8	1871.15	0.00	0.15	89.0
1871.19	0.00	0.19	92.0	1871.26	0.00	0.26	98.0	1871.34	0.00	0.34	100.9
1871.66	0.00	0.56	104.0	1871.38	0.00	0.38	107.9	1871.44	0.00	0.44	114.0
1871.70	0.00	0.60	117.0	1871.89	0.00	0.69	119.0	1871.89	0.00	0.69	122.0
1871.90	0.00	0.70	125.0	1871.96	0.00	0.66	128.0	1871.91	0.00	0.71	131.0
1871.91	0.00	0.71	134.0	1871.92	0.00	0.72	137.0	1871.78	0.00	0.68	141.0
1871.80	0.00	0.70	143.0	1871.57	0.00	0.57	145.0	1871.60	0.00	0.61	151.0
1871.53	0.00	0.63	158.9	1871.69	0.00	0.74	168.4	1871.75	0.00	0.75	178.0
1871.82	0.00	0.82	180.9	1871.86	0.00	0.86	188.9	1871.90	0.00	0.89	191.9
1871.94	0.00	0.84	194.0	1871.95	0.00	0.84	196.0	1872.01	0.00	0.81	201.0
1872.05	0.00	0.75	208.0	1872.03	0.00	0.83	211.0	1872.05	0.00	0.80	220.0
1872.07	0.00	0.77	229.0	1872.08	0.00	0.78	233.0	1872.05	0.00	0.75	238.1
1872.15	0.00	0.75	244.0	1872.15	0.00	0.75	250.0	1872.15	0.00	0.65	254.1
1872.15	0.00	0.55	258.0	1872.00	0.00	0.40	262.2	1872.15	0.00	0.35	274.0
1872.15	0.00	0.35	277.1	1872.15	0.00	0.25	284.0	1872.16	0.00	0.22	300.4
1872.16	0.00	0.19	316.8	1872.16	0.00	0.16	333.0	1872.03	0.00	0.23	349.2
1872.05	0.00	0.45	365.8	1872.16	0.00	0.56	371.0	1872.16	0.00	0.66	382.4

1872.16 0.00 0.75 394.0 1872.16 0.00 0.75 398.0 1872.16 0.00 0.76 402.0  
 1872.16 0.00 0.86 407.9 1872.16 0.00 0.86 412.0 1872.16 0.00 0.86 415.0  
 1872.16 0.00 0.96 422.0 1872.16 0.00 0.96 427.0 1872.16 0.00 0.96 431.0  
 1872.16 0.00 0.86 434.0 1872.16 0.00 0.96 437.0 1872.16 0.00 0.96 439.0  
 1872.16 0.00 0.96 442.0 1872.16 0.00 1.06 448.0 1872.14 0.00 1.14 452.0  
 1872.14 0.00 1.14 454.0 1872.14 0.00 1.14 456.0 1872.10 0.00 1.20 458.0  
 1872.12 0.00 1.21 475.0 1872.12 0.00 1.22 483.0 1872.16 0.00 1.16 486.0  
 1872.16 0.00 1.06 488.0 1872.16 0.00 0.96 491.0 1872.16 0.00 0.76 493.0  
 1872.16 0.00 0.76 495.0 1872.16 0.00 0.66 509.9 1872.16 0.00 0.56 524.8  
 1872.16 0.00 0.46 539.6 1872.16 0.00 0.36 554.4 1872.16 0.00 0.26 569.4  
 1872.16 0.00 0.16 584.1 1872.16 0.00 0.06 588.0 1872.06 0.00 -0.04 590.2  
 1872.24 0.00 0.04 595.0 1872.24 0.00 0.04 598.0 1872.24 0.00 0.04 608.0  
 1872.09 0.00 -0.01 623.6 1872.16 0.00 0.16 639.6 1872.16 0.00 0.26 655.3  
 1872.16 0.00 0.36 671.2 1872.16 0.00 0.46 687.0 1872.16 0.00 0.56 702.9  
 1872.16 0.00 0.56 708.0 1872.16 0.00 0.66 711.9 1872.16 0.00 0.66 716.0  
 1872.16 0.00 0.76 719.0 1872.16 0.00 0.76 725.0 1872.16 0.00 0.66 728.1  
 1872.16 0.00 0.46 737.1 1872.16 0.00 0.26 744.1 1872.18 0.00 0.18 751.1  
 1872.24 0.00 0.14 755.1 1872.25 0.00 0.05 760.0 1872.28 0.00 0.08 772.0  
 1872.52 0.00 0.00 780.0

ID  
 7 SECTION 600.00 TIME = 30.02 HRS WS = 1868.90 WIDTH = 61.8

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1871.57 0.00 0.00 0.0 1870.89 0.00 0.89 16.4 1870.82 0.00 0.82 33.5  
 1870.69 0.00 0.69 50.1 1870.66 0.00 0.66 66.8 1870.66 0.00 0.66 83.5  
 1870.66 0.00 0.66 100.2 1870.66 0.00 0.66 116.9 1870.66 0.00 0.66 133.6  
 1870.66 0.00 0.66 150.3 1870.66 0.00 0.66 167.0 1870.66 0.00 0.45 176.0  
 1870.65 0.00 0.35 191.6 1870.66 0.00 0.25 207.0 1870.65 0.00 0.15 214.0  
 1870.65 0.00 0.05 218.1 1870.69 0.00 -0.01 221.0 1870.65 0.00 -0.05 224.1  
 1870.77 0.00 -0.03 227.0 1870.77 0.00 -0.03 230.0 1870.66 0.00 0.01 243.2  
 1870.65 0.00 0.15 257.0 1870.65 0.00 0.30 268.4 1870.66 0.00 0.46 280.0  
 1870.66 0.00 0.16 282.2 1870.42 0.00 -0.38 285.5 1871.20 0.00 0.00 302.0  
 1871.10 0.00 0.00 306.0 1871.10 0.00 0.00 311.0 1871.20 0.00 0.00 314.0  
 1871.20 0.00 0.00 321.0 1871.30 0.00 0.00 323.0 1871.20 0.00 0.00 329.0  
 1871.20 0.00 0.00 333.0 1871.10 0.00 0.00 336.0 1870.40 0.00 -0.50 339.6  
 1870.82 0.00 -0.08 344.0 1870.67 0.00 -0.13 349.0 1870.75 0.00 -0.05 352.0  
 1870.62 0.00 -0.08 357.9 1870.61 0.00 0.01 360.9 1870.61 0.00 0.01 363.0  
 1870.61 0.00 0.01 366.0 1870.60 0.00 -0.05 379.1 1870.60 0.00 -0.10 392.0  
 1870.60 0.00 0.00 395.9 1870.59 0.00 -0.01 401.0 1870.58 0.00 0.08 414.0  
 1870.58 0.00 0.08 420.0 1870.57 0.00 0.07 436.0 1870.56 0.00 0.16 446.0  
 1870.55 0.00 0.35 455.9 1870.55 0.00 0.35 461.0 1870.54 0.00 0.41 474.7  
 1870.53 0.00 0.46 488.3 1870.52 0.00 0.52 502.0 1870.51 0.00 0.41 509.0  
 1870.51 0.00 0.20 518.1 1870.50 0.00 0.10 524.0 1870.49 0.00 -0.01 531.0  
 1870.49 0.00 -0.01 536.0 1870.48 0.00 -0.12 542.1 1870.48 0.00 -0.22 545.0  
 1870.47 0.00 -0.23 551.1 1870.47 0.00 -0.33 557.0 1870.47 0.00 -0.43 559.2  
 1870.89 0.00 -0.11 566.0 1870.89 0.00 -0.11 569.0 1870.89 0.00 -0.11 573.0  
 1870.45 0.00 -0.45 575.8 1870.76 0.00 -0.14 578.0 1870.75 0.00 -0.15 584.0  
 1870.75 0.00 -0.15 590.0 1870.75 0.00 -0.15 595.0 1870.51 0.00 -0.39 597.1  
 1870.20 0.00 -0.80 600.4 1871.10 0.00 0.00 603.0 1871.10 0.00 0.00 606.0  
 1871.20 0.00 0.00 609.0 1871.20 0.00 0.00 611.0 1871.20 0.00 0.00 613.0  
 1871.20 0.00 0.00 618.0 1871.20 0.00 0.00 622.0 1871.20 0.00 0.00 624.0  
 1871.10 0.00 0.00 627.0 1871.10 0.00 0.00 630.0 1871.10 0.00 0.00 632.0  
 1870.05 0.00 -0.95 640.6 1871.10 0.00 0.00 644.0 1870.02 0.00 -0.98 649.6  
 1870.41 0.00 -0.49 659.9 1870.34 0.00 -0.46 670.0 1870.20 0.00 -0.50 672.9  
 1870.14 0.00 -0.46 677.9 1870.13 0.00 -0.37 681.0 1870.08 0.00 -0.32 683.0  
 1870.14 0.00 -0.16 684.9 1869.21 0.00 -0.89 688.1 1868.98 0.00 -1.09 704.6  
 1868.96 0.00 -1.07 719.8 1868.67 -0.02 -1.34 737.0 1868.69 -0.02 -1.51 740.0  
 1868.74 -0.02 -1.46 746.0 1868.29 0.01 -1.80 749.1 1867.89 0.01 -2.20 764.0  
 1867.89 0.01 -2.21 770.0 1867.89 0.01 -2.11 776.0 1867.89 0.01 -2.31 779.3  
 1868.13 -0.01 -2.37 784.2 1870.99 0.00 0.39 789.0 1870.99 0.00 0.39 793.1

1871.04 0.00 0.44 797.0 1871.57 0.00 0.00 800.0

## ID

6 SECTION 500.00 TIME = 30.02 HRS WS =1867.91 WIDTH = 70.8

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1870.36	0.00	0.00	0.0	1870.01	0.00	0.06	15.9	1870.01	0.00	0.10	31.8
1870.01	0.00	0.15	47.7	1870.01	0.00	0.19	63.6	1870.01	0.00	0.24	79.5
1870.00	0.00	0.27	95.4	1869.97	0.00	0.29	111.3	1869.96	0.00	0.33	127.3
1869.95	0.00	0.36	143.2	1869.93	0.00	0.39	159.1	1869.91	0.00	0.41	175.0
1869.90	0.00	0.40	178.0	1869.90	0.00	0.40	182.0	1869.91	0.00	0.31	195.6
1869.92	0.00	0.22	209.2	1869.96	0.00	0.16	222.9	1870.01	0.00	0.11	236.4
1870.01	0.00	0.01	250.0	1870.01	0.00	0.11	255.0	1869.94	0.00	0.14	264.9
1869.90	0.00	0.20	272.0	1869.94	0.00	0.24	278.0	1869.86	0.00	0.26	284.0
1869.90	0.00	0.30	287.0	1869.89	0.00	0.29	294.0	1869.89	0.00	0.29	299.0
1869.89	0.00	0.29	307.0	1869.82	0.00	0.32	314.0	1869.88	0.00	0.28	320.0
1869.88	0.00	0.28	323.0	1869.84	0.00	0.24	325.0	1869.87	0.00	0.17	328.0
1869.97	0.00	0.17	331.0	1869.97	0.00	0.17	334.0	1869.86	0.00	0.16	338.0
1869.92	0.00	0.22	340.0	1869.86	0.00	0.16	344.0	1869.96	0.00	0.16	346.0
1869.90	0.00	0.10	348.1	1870.01	0.00	0.11	356.0	1870.01	0.00	0.11	361.0
1869.89	0.00	0.09	365.9	1869.96	0.00	0.16	368.0	1869.96	0.00	0.16	373.0
1869.83	0.00	0.13	382.0	1869.79	0.00	0.19	388.0	1869.76	0.00	0.26	393.0
1869.56	0.00	0.15	409.5	1869.45	0.00	0.15	426.0	1869.44	0.00	0.14	431.0
1869.50	0.00	0.10	433.1	1869.71	0.00	0.21	446.0	1869.79	0.00	0.19	459.0
1869.79	0.00	0.19	463.0	1869.66	0.00	0.16	466.0	1869.72	0.00	0.17	482.5
1869.75	0.00	0.15	499.0	1869.71	0.00	0.06	515.5	1869.81	0.00	0.11	532.0
1869.48	0.00	-0.02	549.0	1869.56	0.00	0.06	551.0	1869.54	0.00	0.04	562.0
1869.55	0.00	0.05	564.0	1869.54	0.00	0.04	573.0	1869.53	0.00	0.02	582.0
1869.43	0.00	-0.17	590.1	1869.75	0.00	-0.05	598.1	1869.95	0.00	0.05	601.0
1869.94	0.00	-0.06	608.1	1870.00	0.00	-0.10	612.0	1869.63	0.00	-0.47	616.2
1870.20	0.00	0.00	620.0	1870.20	0.00	0.00	625.0	1870.20	0.00	0.00	630.0
1870.20	0.00	0.00	638.0	1869.63	0.00	-0.47	642.7	1870.00	0.00	-0.10	648.0
1869.93	0.00	-0.07	652.9	1870.01	0.00	0.01	657.0	1869.55	0.00	-0.25	669.9
1869.71	0.00	-0.04	682.0	1869.56	0.00	-0.14	694.0	1869.50	0.00	-0.20	696.1
1869.79	0.00	-0.01	699.0	1868.42	-0.01	-1.38	704.0	1867.42	0.00	-2.38	705.4
1867.40	-0.01	-2.30	710.0	1867.40	-0.01	-2.30	713.5	1867.41	0.02	-2.19	716.0
1867.41	-0.01	-2.09	720.1	1867.39	-0.01	-2.01	727.2	1867.41	-0.01	-1.79	735.0
1867.40	-0.01	-1.70	739.0	1867.40	-0.01	-1.60	742.0	1867.39	-0.01	-1.51	745.0
1867.41	0.02	-1.39	748.0	1867.40	-0.01	-1.30	751.0	1867.16	0.02	-1.44	766.0
1867.14	0.02	-1.46	770.0	1867.22	0.00	-1.39	772.7	1868.10	0.00	-0.60	776.4
1868.70	0.00	0.00	777.0	1869.75	0.00	1.05	779.0	1870.36	0.00	0.00	784.0

## ID

5 SECTION 400.00 TIME = 30.02 HRS WS =1866.66 WIDTH = 49.4

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1869.24	0.00	0.00	0.0	1868.81	0.00	0.21	12.8	1868.78	0.00	0.28	25.9
1868.78	0.00	0.38	36.0	1868.78	0.00	0.38	38.1	1868.78	0.00	0.13	51.1
1868.78	0.00	-0.12	64.1	1868.79	0.00	-0.21	66.0	1868.67	0.00	-0.33	68.2
1869.20	0.00	0.00	71.0	1869.20	0.00	0.00	73.0	1869.20	0.00	0.00	76.0
1869.30	0.00	0.00	80.0	1869.05	0.00	0.00	90.0	1868.58	0.00	-0.22	99.7
1868.78	0.00	0.08	102.0	1868.78	0.00	0.28	106.9	1868.78	0.00	0.48	109.0
1868.76	0.00	0.65	114.0	1868.78	0.00	0.59	129.8	1868.78	0.00	0.51	145.5
1868.78	0.00	0.42	161.3	1868.78	0.00	0.33	177.1	1868.78	0.00	0.24	192.8
1868.78	0.00	0.15	208.5	1868.78	0.00	0.06	224.3	1868.79	0.00	-0.01	240.0
1868.79	0.00	-0.01	244.0	1868.79	0.00	-0.01	248.0	1868.79	0.00	0.10	257.0
1868.79	0.00	-0.01	263.0	1868.79	0.00	-0.01	267.0	1868.79	0.00	-0.01	271.0
1868.79	0.00	-0.01	282.0	1868.79	0.00	-0.01	286.0	1868.79	0.00	0.09	289.0
1868.79	0.00	0.09	292.0	1868.79	0.00	0.09	295.0	1868.79	0.00	0.19	299.0
1868.79	0.00	0.19	303.0	1868.79	0.00	0.29	309.9	1868.78	0.00	0.27	317.1

1868.77 0.00 0.18 319.0 1868.79 0.00 0.19 322.0 1868.79 0.00 0.19 326.0  
 1868.79 0.00 0.09 332.0 1868.79 0.00 0.09 335.0 1868.79 0.00 -0.01 338.0  
 1868.79 0.00 -0.01 340.1 1868.79 0.00 -0.11 345.0 1868.79 0.00 -0.02 348.9  
 1868.79 0.00 -0.02 352.0 1868.79 0.00 -0.01 356.0 1868.79 0.00 0.09 358.0  
 1868.79 0.00 0.09 363.0 1868.79 0.00 0.18 372.0 1868.79 0.00 0.19 377.0  
 1868.78 0.00 0.08 380.0 1868.79 0.00 0.09 384.0 1868.79 0.00 0.09 389.0  
 1868.78 0.00 0.18 397.0 1868.79 0.00 0.19 409.0 1868.79 0.00 0.09 412.0  
 1868.79 0.00 0.09 417.0 1868.78 0.00 0.08 430.0 1868.78 0.00 0.18 437.0  
 1868.78 0.00 0.18 443.0 1868.74 0.00 0.24 447.9 1868.76 0.00 0.36 454.0  
 1868.59 0.00 0.29 461.0 1868.59 0.00 0.29 468.0 1868.58 0.00 0.31 484.7  
 1868.58 0.00 0.34 501.4 1868.44 0.00 0.24 518.0 1868.16 0.00 -0.01 534.6  
 1867.10 0.00 -1.04 545.6 1867.06 0.00 -1.04 569.8 1866.65 0.01 -1.65 580.0  
 1868.06 0.00 -0.44 582.1 1868.78 0.00 0.18 587.0 1868.77 0.00 0.08 590.0  
 1868.77 0.00 -0.03 594.1 1868.77 0.00 -0.13 597.0 1868.77 0.00 -0.13 600.0  
 1868.77 0.00 -0.13 609.0 1868.76 0.00 -0.14 618.0 1868.77 0.00 -0.03 619.9  
 1868.77 0.00 -0.03 626.0 1868.77 0.00 0.12 635.5 1868.14 0.00 -0.36 644.8  
 1865.58 -0.01 -2.92 648.9 1867.06 0.00 -1.44 656.5 1867.10 0.00 -1.40 660.5  
 1867.06 0.00 -1.54 663.7 1867.06 0.00 -1.64 666.0 1867.06 0.00 -1.64 669.0  
 1867.10 0.00 -1.70 672.0 1866.37 0.00 -2.43 674.0 1868.75 0.00 -0.04 678.0  
 1868.75 0.00 -0.05 682.0 1868.75 0.00 -0.05 685.0 1868.75 0.00 -0.05 690.0  
 1868.75 0.00 0.05 698.0 1867.85 0.00 -0.75 705.0 1865.57 -0.01 -2.83 708.4  
 1867.10 0.00 -1.10 730.0 1866.79 0.00 -1.37 743.8 1865.20 -0.06 -2.92 765.8  
 1868.08 0.00 0.00 772.0 1868.80 0.00 0.76 786.0 1869.24 0.00 0.00 800.0

## ID

4 SECTION 300.00 TIME = 30.02 HRS WS = 1865.47 WIDTH = 28.6

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1868.50 0.00 0.00 0.0 1868.40 0.00 0.00 4.0 1868.40 0.00 0.00 9.0  
 1868.40 0.00 0.00 11.0 1868.40 0.00 0.00 16.0 1868.40 0.00 0.00 21.0  
 1868.40 0.00 0.00 22.0 1868.40 0.00 0.00 24.0 1868.40 0.00 0.00 26.0  
 1868.40 0.00 0.00 34.0 1868.40 0.00 0.00 38.0 1868.40 0.00 0.00 41.0  
 1868.40 0.00 0.00 42.0 1868.40 0.00 0.00 44.0 1868.40 0.00 0.00 47.0  
 1868.40 0.00 0.00 50.0 1868.30 0.00 0.00 54.0 1868.30 0.00 0.00 56.0  
 1868.30 0.00 0.00 60.0 1868.20 0.00 0.00 64.0 1868.20 0.00 0.00 73.0  
 1868.10 0.00 0.00 85.0 1868.00 0.00 0.00 93.0 1868.00 0.00 0.00 96.0  
 1868.00 0.00 0.00 111.5 1868.00 0.00 0.00 127.1 1868.00 0.00 0.00 142.6  
 1868.00 0.00 0.00 158.2 1868.00 0.00 0.00 173.7 1868.00 0.00 0.00 189.3  
 1868.00 0.00 0.00 204.8 1868.00 0.00 0.00 220.4 1868.00 0.00 0.00 235.9  
 1868.00 0.00 0.00 251.5 1868.00 0.00 0.00 267.0 1867.33 0.00 -0.47 279.9  
 1867.47 0.00 -0.13 294.0 1867.47 0.00 -0.23 298.0 1867.47 0.00 -0.23 300.0  
 1867.47 0.00 -0.23 314.0 1867.47 0.00 -0.23 328.0 1867.47 0.00 -0.23 332.0  
 1867.47 0.00 -0.23 336.0 1867.47 0.00 -0.23 340.0 1867.47 0.00 -0.23 343.0  
 1867.47 0.00 -0.23 345.0 1867.47 0.00 -0.23 346.0 1867.47 0.00 -0.23 349.0  
 1867.47 0.00 -0.23 351.0 1867.47 0.00 -0.13 354.0 1867.47 0.00 -0.13 357.0  
 1867.47 0.00 -0.13 358.0 1867.47 0.00 -0.13 359.0 1867.47 0.00 -0.13 364.0  
 1867.47 0.00 -0.13 365.0 1867.47 0.00 -0.03 369.0 1867.47 0.00 -0.03 372.0  
 1867.47 0.00 -0.03 375.0 1867.47 0.00 -0.03 378.0 1867.47 0.00 -0.03 379.0  
 1867.47 0.00 -0.03 387.0 1867.47 0.00 -0.03 389.0 1867.47 0.00 -0.03 393.0  
 1867.47 0.00 -0.03 394.0 1867.47 0.00 -0.03 399.0 1867.47 0.00 -0.03 400.0  
 1867.47 0.00 -0.03 402.0 1867.47 0.00 0.07 403.0 1867.47 0.00 0.07 413.0  
 1867.47 0.00 -0.03 417.0 1867.47 0.00 -0.03 419.0 1867.47 0.00 -0.03 427.0  
 1867.47 0.00 -0.13 429.0 1867.47 0.00 -0.13 433.0 1867.47 0.00 -0.13 434.0  
 1867.47 0.00 -0.23 438.0 1867.47 0.00 -0.23 443.0 1867.47 0.00 -0.23 444.0  
 1867.47 0.00 -0.13 445.0 1867.47 0.00 -0.23 459.0 1867.47 0.00 -0.33 473.1  
 1866.84 0.00 -1.06 486.7 1868.00 0.00 0.00 501.0 1867.93 0.00 0.00 514.8  
 1866.39 0.00 -1.46 526.1 1867.47 0.00 -0.31 542.2 1867.47 0.00 -0.23 556.0  
 1867.47 0.00 -0.23 559.0 1867.47 0.00 -0.28 569.5 1867.47 0.00 -0.33 580.0  
 1867.47 0.00 -0.33 587.1 1867.47 0.00 -0.43 588.0 1865.77 0.00 -2.13 593.4  
 1868.00 0.00 0.00 598.0 1868.00 0.00 0.00 601.0 1867.14 0.00 -0.86 614.0  
 1867.00 0.00 -1.00 614.2 1865.55 0.00 -2.35 616.5 1867.27 0.00 -0.54 620.9

1866.63 0.00 -1.07 621.8 1866.07 0.00 -1.53 622.6 1867.00 0.00 -0.60 624.4  
 1867.00 0.00 -0.50 626.2 1867.00 0.00 -0.40 629.0 1866.47 0.00 -0.93 630.0  
 1865.68 0.00 -1.62 631.1 1866.04 0.00 -1.26 636.0 1865.92 0.00 -1.38 646.0  
 1865.91 0.00 -1.39 648.0 1865.74 0.00 -1.56 654.0 1865.76 0.00 -1.54 655.0  
 1865.62 0.00 -1.68 659.0 1865.49 0.00 -1.81 662.0 1865.47 0.00 -1.83 663.0  
 1865.34 0.00 -1.86 665.0 1864.31 0.00 -2.79 680.0 1864.08 -0.01 -3.02 682.0  
 1863.85 -0.01 -3.25 684.0 1863.87 -0.01 -3.33 688.2 1867.09 0.00 -0.51 695.0  
 1867.09 0.00 -0.51 696.0 1867.09 0.00 -0.51 698.7 1867.09 0.00 -0.51 700.2  
 1867.09 0.00 -0.60 701.7 1867.09 0.00 -0.61 703.0 1867.09 0.00 -0.60 704.0  
 1867.09 0.00 -0.61 704.8 1867.09 0.00 -0.61 705.4 1867.09 0.00 -0.51 706.7  
 1867.09 0.00 -0.51 708.0 1867.09 0.00 -0.51 709.0 1867.09 0.00 -0.51 711.0  
 1867.09 0.00 -0.41 712.3 1867.09 0.00 -0.41 716.0 1867.09 0.00 -0.41 719.0  
 1867.09 0.00 -0.35 735.5 1867.09 0.00 -0.31 752.0 1867.09 0.00 -0.25 768.5  
 1867.09 0.00 -0.21 784.9 1867.09 0.00 -0.21 785.9 1867.09 0.00 -0.30 789.0  
 1867.09 0.00 -0.21 789.7 1867.09 0.00 -0.21 790.7 1867.09 0.00 -0.30 794.8  
 1867.09 0.00 -0.31 796.7 1867.50 0.00 0.10 797.1 1867.90 0.00 0.50 797.8  
 1868.11 0.00 0.00 800.0

## ID

3 SECTION 200.00 TIME = 30.02 HRS WS =1865.07 WIDTH = 29.0

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1868.00 0.00 0.00 0.0 1867.92 0.00 0.00 15.7 1867.84 0.00 0.00 31.3  
 1867.77 0.00 0.00 47.0 1867.69 0.00 0.00 62.7 1867.61 0.00 0.00 78.3  
 1867.53 0.00 0.00 94.0 1867.46 0.00 0.00 109.7 1867.38 0.00 0.00 125.3  
 1867.30 0.00 0.00 141.0 1867.30 0.00 0.00 147.0 1867.20 0.00 0.00 151.0  
 1867.20 0.00 0.00 153.0 1867.30 0.00 0.00 167.0 1867.20 0.00 0.00 169.0  
 1867.20 0.00 0.00 174.0 1867.10 0.00 0.00 180.0 1867.20 0.00 0.00 183.0  
 1867.20 0.00 0.00 185.0 1867.20 0.00 0.00 187.0 1867.30 0.00 0.00 199.0  
 1867.30 0.00 0.00 207.0 1867.30 0.00 0.00 211.0 1867.30 0.00 0.00 215.0  
 1867.30 0.00 0.00 226.0 1867.20 0.00 0.00 229.0 1867.20 0.00 0.00 237.0  
 1867.20 0.00 0.00 240.0 1867.30 0.00 0.00 242.0 1867.30 0.00 0.00 246.0  
 1867.10 0.00 0.00 256.0 1866.90 0.00 0.00 266.0 1866.80 0.00 0.00 269.0  
 1866.80 0.00 0.00 273.0 1866.42 0.00 -0.03 287.8 1866.49 0.00 0.39 305.9  
 1866.49 0.00 0.49 315.0 1866.49 0.00 0.34 324.5 1866.49 0.00 0.19 334.0  
 1866.49 0.00 0.19 338.0 1866.49 0.00 0.09 345.0 1866.49 0.00 0.09 354.0  
 1866.49 0.00 0.09 357.0 1866.49 0.00 0.09 361.0 1866.49 0.00 0.09 367.0  
 1866.49 0.00 0.09 372.0 1866.49 0.00 0.09 376.0 1866.49 0.00 0.09 379.1  
 1866.49 0.00 -0.01 388.7 1866.49 0.00 -0.11 398.0 1866.49 0.00 -0.11 400.0  
 1866.49 0.00 -0.21 410.0 1866.32 0.00 -0.38 418.7 1866.80 0.00 0.00 424.0  
 1866.80 0.00 0.00 428.0 1866.90 0.00 0.00 433.0 1866.80 0.00 0.00 441.0  
 1866.80 0.00 0.00 448.0 1866.90 0.00 0.00 451.0 1866.90 0.00 0.00 455.0  
 1866.90 0.00 0.00 459.0 1867.00 0.00 0.00 463.0 1867.00 0.00 0.00 469.0  
 1866.90 0.00 0.00 472.0 1866.90 0.00 0.00 474.0 1866.80 0.00 0.00 476.0  
 1866.80 0.00 0.00 480.0 1866.90 0.00 0.00 484.0 1866.90 0.00 0.00 487.0  
 1866.90 0.00 0.00 492.0 1867.00 0.00 0.00 495.0 1867.00 0.00 0.00 497.0  
 1867.00 0.00 0.00 502.0 1867.00 0.00 0.00 510.0 1867.00 0.00 0.00 519.0  
 1866.90 0.00 0.00 521.0 1866.90 0.00 0.00 523.0 1866.80 0.00 0.00 527.0  
 1866.80 0.00 0.00 531.0 1866.03 0.00 -0.77 532.9 1866.32 0.00 -0.48 537.1  
 1866.27 0.00 -0.43 544.7 1866.49 0.00 -0.16 555.0 1866.49 0.00 -0.11 565.0  
 1866.49 0.00 -0.12 573.0 1866.46 0.00 -0.24 578.1 1866.46 0.00 -0.24 580.8  
 1866.45 0.00 -0.25 586.0 1866.48 0.00 -0.32 588.0 1866.09 0.00 -0.60 594.0  
 1866.48 0.00 -0.12 606.0 1866.48 0.00 -0.12 609.0 1866.48 0.00 -0.05 625.5  
 1866.48 0.00 0.02 642.4 1866.43 0.00 0.04 658.2 1866.47 0.00 0.15 675.7  
 1866.35 0.00 0.10 692.2 1866.47 0.00 0.29 709.2 1863.54 0.00 -2.57 722.5  
 1866.26 0.00 0.22 742.3 1866.17 0.00 0.20 759.3 1865.92 0.00 0.02 776.0  
 1863.81 0.00 -2.09 780.8 1863.48 0.06 -2.32 786.7 1866.53 0.00 0.73 790.7  
 1866.70 0.00 0.80 793.0 1867.29 0.00 0.00 797.0

## ID

2 SECTION 100.00 TIME = 30.02 HRS WS =1864.77 WIDTH = 57.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
1867.70	0.00	0.00	0.0	1867.70	0.00	0.00	4.0	1867.70	0.00	0.00	6.0	
1867.77	0.00	0.00	22.5	1867.85	0.00	0.00	39.0	1867.92	0.00	0.00	55.5	
1868.00	0.00	0.00	72.0	1867.74	0.00	0.00	88.6	1867.48	0.00	0.00	105.2	
1867.22	0.00	0.00	121.8	1866.96	0.00	0.00	138.4	1866.70	0.00	0.00	155.0	
1866.70	0.00	0.00	160.0	1866.70	0.00	0.00	165.0	1866.60	0.00	0.00	179.0	
1866.40	0.00	0.00	193.0	1866.30	0.00	0.00	204.5	1866.20	0.00	0.00	216.0	
1866.15	0.00	0.00	230.8	1866.10	0.00	0.00	245.5	1866.05	0.00	0.00	260.2	
1866.00	0.00	0.00	275.0	1865.80	0.00	0.00	285.5	1865.30	0.00	-0.30	291.0	
1865.27	0.00	-0.42	301.3	1865.27	0.00	-0.53	303.1	1865.27	0.00	-0.62	305.3	
1865.27	0.00	-0.73	308.4	1864.49	0.02	-1.41	310.9	1865.91	0.00	0.00	324.6	
1865.92	0.00	0.00	340.2	1865.94	0.00	0.00	355.9	1865.95	0.00	0.00	371.5	
1865.96	0.00	0.00	387.1	1865.97	0.00	0.00	402.8	1865.99	0.00	0.00	418.4	
1866.00	0.00	0.00	434.0	1866.00	0.00	0.00	435.0	1866.00	0.00	0.00	439.0	
1866.00	0.00	0.00	441.0	1866.00	0.00	0.00	442.0	1866.00	0.00	0.00	458.0	
1866.00	0.00	0.00	474.0	1866.00	0.00	0.00	490.0	1866.00	0.00	0.00	506.0	
1866.00	0.00	0.00	522.0	1865.90	0.00	0.00	528.0	1865.90	0.00	0.00	533.0	
1865.90	0.00	0.00	534.0	1865.90	0.00	0.00	537.0	1865.80	0.00	0.00	539.0	
1865.80	0.00	0.00	540.0	1865.80	0.00	0.00	541.0	1864.37	0.00	-1.23	544.8	
1865.26	0.00	-0.24	555.9	1865.27	0.00	-0.13	557.8	1865.27	0.00	-0.13	561.0	
1865.26	0.00	-0.04	563.8	1865.26	0.00	0.06	566.8	1865.26	0.00	0.06	569.0	
1865.26	0.00	0.06	573.0	1865.26	0.00	0.16	573.8	1865.26	0.00	0.16	576.0	
1865.26	0.00	0.16	578.0	1865.27	0.00	0.27	579.9	1865.27	0.00	0.27	582.0	
1865.27	0.00	0.27	583.0	1865.27	0.00	0.27	586.4	1865.27	0.00	0.07	592.0	
1865.27	0.00	0.07	593.0	1865.27	0.00	0.07	596.0	1865.27	0.00	0.07	597.0	
1865.27	0.00	0.07	598.0	1865.27	0.00	0.07	599.0	1865.27	0.00	0.27	600.6	
1865.27	0.00	0.26	603.1	1865.26	0.00	0.16	604.0	1865.26	0.00	0.16	605.0	
1865.26	0.00	0.16	606.2	1865.26	0.00	0.06	608.0	1865.26	0.00	0.06	610.0	
1865.26	0.00	0.06	611.0	1865.25	0.00	0.05	612.0	1865.26	0.00	0.26	617.6	
1865.26	0.00	0.26	620.0	1865.26	0.00	0.26	621.0	1865.26	0.00	0.35	622.9	
1865.26	0.00	0.36	624.1	1865.26	0.00	0.26	626.0	1865.26	0.00	0.26	627.0	
1865.26	0.00	0.26	628.0	1865.26	0.00	0.26	629.0	1865.26	0.00	0.26	632.0	
1865.26	0.00	0.36	633.9	1865.26	0.00	0.36	635.0	1865.26	0.00	0.36	636.1	
1865.25	0.00	0.25	645.1	1865.25	0.00	0.16	646.0	1865.25	0.00	0.15	647.6	
1865.25	0.00	-0.15	660.8	1863.67	0.00	-2.03	678.9	1865.92	0.00	-0.08	687.0	
1863.67	0.00	-2.13	693.3	1863.67	0.00	-1.93	704.1	1865.23	0.00	-0.37	709.0	
1865.23	0.00	-0.27	709.9	1865.25	0.00	-0.25	713.0	1865.24	0.00	-0.26	714.0	
1865.23	0.00	-0.07	725.6	1865.24	0.00	-0.06	727.0	1865.23	0.00	-0.07	729.0	
1865.24	0.00	0.04	730.8	1865.23	0.00	0.03	732.0	1865.23	0.00	0.03	733.0	
1865.23	0.00	0.13	734.8	1865.23	0.00	0.23	737.9	1865.24	0.00	0.34	741.9	
1865.24	0.00	0.64	748.9	1864.33	0.00	0.03	757.5	1863.60	0.00	-0.60	761.1	
1865.64	0.00	1.64	772.0	1865.64	0.00	1.54	774.0	1865.64	0.00	1.54	776.0	
1865.64	0.00	1.54	777.0	1865.64	0.00	1.44	782.0	1865.64	0.00	1.44	787.0	
1865.64	0.00	1.34	791.3	1865.73	0.00	1.43	792.0	1867.29	0.00	0.00	800.0	

ID  
1 SECTION 1.00 TIME = 30.02 HRS WS = 1863.84 WIDTH = 46.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	
1866.90	0.00	0.00	0.0	1866.80	0.00	0.00	10.5	1866.70	0.00	0.00	21.0	
1866.60	0.00	0.00	27.0	1866.50	0.00	0.00	37.0	1866.25	0.00	0.00	52.0	
1866.00	0.00	0.00	67.0	1866.20	0.00	0.00	77.0	1866.10	0.00	0.00	80.0	
1866.10	0.00	0.00	82.0	1866.10	0.00	0.00	83.0	1866.20	0.00	0.00	88.0	
1866.13	0.00	0.00	102.0	1866.07	0.00	0.00	116.0	1866.00	0.00	0.00	130.0	
1866.15	0.00	0.00	143.0	1866.30	0.00	0.00	156.0	1866.15	0.00	0.00	172.0	
1866.00	0.00	0.00	188.0	1866.00	0.00	0.00	204.0	1866.00	0.00	0.00	220.0	
1866.10	0.00	0.00	222.0	1866.10	0.00	0.00	225.0	1866.10	0.00	0.00	226.0	
1866.10	0.00	0.00	232.0	1866.10	0.00	0.00	234.0	1866.00	0.00	0.00	250.0	
1866.00	0.00	0.00	254.0	1866.00	0.00	0.00	255.0	1866.00	0.00	0.00	258.0	

1865.90	0.00	0.00	263.0	1865.90	0.00	0.00	266.0	1865.90	0.00	0.00	267.0
1865.80	0.00	0.00	269.0	1865.80	0.00	0.00	270.0	1865.80	0.00	0.00	271.0
1865.80	0.00	0.00	272.0	1865.80	0.00	0.00	273.0	1865.80	0.00	0.00	274.0
1865.70	0.00	0.00	278.0	1865.60	0.00	0.00	283.0	1865.50	0.00	0.00	286.0
1865.20	0.00	0.00	297.5	1864.90	0.00	0.00	309.0	1864.80	0.00	0.00	314.0
1864.80	0.00	0.23	326.1	1864.79	0.00	0.46	337.9	1864.79	0.00	0.69	350.1
1864.79	0.00	0.79	351.1	1864.78	0.00	0.78	367.1	1864.78	0.00	0.78	383.5
1864.80	0.00	0.00	385.0	1865.10	0.00	0.00	387.0	1865.80	0.00	0.00	391.0
1865.90	0.00	0.00	393.0	1866.00	0.00	0.00	395.0	1865.60	0.00	0.00	397.0
1865.30	0.00	0.00	398.0	1865.30	0.00	0.00	399.0	1865.40	0.00	0.00	400.0
1865.50	0.00	0.00	403.0	1865.60	0.00	0.00	405.0	1865.60	0.00	0.00	407.0
1865.60	0.00	0.00	408.0	1865.60	0.00	0.00	411.0	1865.60	0.00	0.00	412.0
1865.60	0.00	0.00	413.0	1865.60	0.00	0.00	414.0	1865.60	0.00	0.00	415.0
1865.60	0.00	0.00	416.0	1865.60	0.00	0.00	417.0	1865.50	0.00	0.00	419.0
1865.50	0.00	0.00	420.0	1865.40	0.00	0.00	421.0	1865.10	0.00	0.00	426.0
1865.10	0.00	0.00	427.0	1865.10	0.00	0.00	428.0	1864.78	0.00	0.13	439.0
1864.78	0.00	0.57	449.7	1864.78	0.00	0.47	455.0	1864.77	0.00	0.47	459.0
1864.77	0.00	0.47	462.0	1864.77	0.00	0.47	463.1	1864.77	0.00	0.37	465.1
1864.77	0.00	0.27	466.2	1864.77	0.00	0.17	467.0	1864.77	0.00	0.07	477.5
1864.80	0.00	0.00	488.0	1864.77	0.00	0.07	490.0	1864.78	0.00	0.08	492.0
1864.78	0.00	0.08	495.0	1864.77	0.00	0.17	498.0	1864.77	0.00	0.17	500.0
1864.77	0.00	0.17	503.0	1864.77	0.00	0.17	507.0	1864.77	0.00	0.17	511.0
1864.77	0.00	0.17	513.0	1864.77	0.00	0.17	520.0	1864.77	0.00	0.27	523.8
1864.73	0.00	0.33	530.8	1864.68	0.00	0.38	537.8	1864.68	0.00	0.48	539.0
1864.65	0.00	0.55	544.0	1864.65	0.00	0.60	555.5	1864.65	0.00	0.64	567.0
1864.57	0.00	0.47	581.7	1864.29	0.00	0.21	597.4	1864.28	0.00	0.24	614.0
1864.27	0.00	0.25	630.0	1864.25	0.00	0.25	646.0	1864.26	0.00	0.09	660.7
1864.26	0.00	-0.08	675.4	1864.26	0.00	-0.24	690.0	1864.26	0.00	-0.24	695.0
1864.26	0.00	-0.24	696.0	1864.26	0.00	-0.24	697.0	1864.26	0.00	-0.25	703.0
1864.25	0.00	-0.14	704.9	1864.25	0.00	-0.14	707.0	1864.26	0.00	-0.14	709.0
1864.26	0.00	-0.14	710.0	1864.26	0.00	-0.15	711.0	1864.26	0.00	-0.15	712.0
1864.25	0.00	-0.15	714.0	1864.25	0.00	-0.15	716.0	1864.25	0.00	-0.15	719.0
1864.25	0.00	-0.05	722.0	1864.25	0.00	-0.05	724.0	1864.25	0.00	0.05	725.0
1864.25	0.00	0.05	727.0	1864.25	0.00	0.05	729.0	1864.25	0.00	0.15	732.0
1864.25	0.00	0.15	737.0	1864.25	0.00	0.15	738.0	1864.25	0.00	0.15	741.0
1864.25	0.00	0.25	744.0	1864.25	0.00	0.25	748.0	1864.25	0.00	0.25	749.0
1863.07	0.00	-0.83	751.1	1863.06	0.00	-0.73	758.4	1863.07	0.00	-0.73	763.0
1863.06	0.00	-0.74	765.0	1863.06	0.00	-0.74	766.0	1863.05	0.02	-0.65	770.9
1863.02	0.02	-0.58	777.0	1863.01	0.03	-0.59	779.0	1862.96	0.03	-0.54	786.0
1862.93	0.03	-0.57	788.0	1862.97	0.03	-0.53	791.0	1863.40	0.02	0.00	795.7
1864.77	0.00	1.47	798.0	1865.00	0.00	0.00	800.0				

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\* FLUVIAL-12 SIMULATION OF RIVER HYDRAULICS, \*
\* SEDIMENT TRANSPORT AND RIVER CHANNEL CHANGES \*
\* FOR USE BY HOWARD H. CHANG \*
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THIS PROGRAM IS DEVELOPED AND FURNISHED BY HOWARD H. CHANG AND IS ACCEPTED AND USED BY THE RECIPIENT UPON THE EXPRESS UNDERSTANDING THAT THE DEVELOPER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE ACCURACY, COMPLETENESS, RELIABILITY, USABILITY, OR SUITABILITY FOR ANY PARTICULAR PURPOSE OF THE INFORMATION AND DATA CONTAINED IN THIS PROGRAM OR FURNISHED IN CONNECTION THEREWITH, AND THE DEVELOPER SHALL BE UNDER NO LIABILITY WHATSOEVER TO ANY PERSON BY REASON OF ANY USE MADE THEREOF.

T1 CALICO SITE, TYPICAL WASH ON ALLUVIAL FAN

T2

T3

G1 1.00 31.00 120.00 3.00 0.50 0.00 0.03 17.00 30.00 300.00

G2 78.00 3.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

G2 5.00 0.00 200.00 1.00 75.00 31.00

G3 0.04 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

G4 10000.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

G5 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.00

GS 0.13 0.14 0.26 0.20 0.45 0.20 0.73 0.20 2.20 0.26

GQ 4.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00

GQ 1905.40 5.00 1906.00 30.00 1906.70 75.00 1909.00 600.00

X1 155.00 9.00 12.00 28.00 0.00 0.00 15500.00 0.00 0.00 1.00

XF 0.00 0.00 0.00 0.00 1.00 0.00 0.00 0.00 0.00 0.00

X3 80.00

GR 1909.00 10.00 1908.95 10.95 1908.90 11.90 1908.85 12.85 1908.80 13.80

GR 1908.75 14.75 1908.70 15.70 1908.65 16.65 1908.60 17.60 1908.55 18.55

GR 1908.50 19.50 1908.45 20.45 1908.40 21.40 1908.35 22.35 1908.30 23.30

GR 1908.25 24.25 1908.20 25.20 1908.15 26.15 1908.10 27.10 1908.05 28.05

GR 1908.00 29.00 1907.50 29.80 1907.00 30.60 1906.50 31.40 1906.00 32.20

GR 1905.50 33.00 1905.40 33.67 1905.30 34.33 1905.20 35.00 1905.19 35.94

GR 1905.18 36.88 1905.16 37.81 1905.15 38.75 1905.14 39.69 1905.13 40.62

GR 1905.11 41.56 1905.10 42.50 1905.09 43.44 1905.08 44.38 1905.06 45.31

GR 1905.05 46.25 1905.04 47.19 1905.03 48.12 1905.01 49.06 1905.00 50.00

GR 1905.01 50.94 1905.02 51.88 1905.04 52.81 1905.05 53.75 1905.06 54.69

GR 1905.07 55.62 1905.09 56.56 1905.10 57.50 1905.11 58.44 1905.12 59.38

GR 1905.14 60.31 1905.15 61.25 1905.16 62.19 1905.17 63.12 1905.19 64.06

GR 1905.20 65.00 1905.30 65.67 1905.40 66.33 1905.50 67.00 1906.12 67.75

GR 1906.75 68.50 1907.38 69.25 1908.00 70.00 1908.05 70.95 1908.10 71.90

GR 1908.14 72.86 1908.19 73.81 1908.24 74.76 1908.29 75.71 1908.33 76.67

GR 1908.38 77.62 1908.43 78.57 1908.48 79.52 1908.52 80.48 1908.57 81.43

GR 1908.62 82.38 1908.67 83.33 1908.71 84.29 1908.76 85.24 1908.81 86.19

GR 1908.86 87.14 1908.90 88.10 1908.95 89.05 1909.00 90.00

X1 156.00 9.00 12.00 28.00 0.00 0.00 100.00 0.00 1.84 0.00

X3 80.00

GR 1910.84 10.00 1910.79 10.95 1910.74 11.90 1910.69 12.85 1910.64 13.80

GR 1910.59 14.75 1910.54 15.70 1910.49 16.65 1910.44 17.60 1910.39 18.55

GR 1910.34 19.50 1910.29 20.45 1910.24 21.40 1910.19 22.35 1910.14 23.30

GR 1910.09 24.25 1910.04 25.20 1909.99 26.15 1909.94 27.10 1909.89 28.05

GR 1909.84 29.00 1909.34 29.80 1908.84 30.60 1908.34 31.40 1907.84 32.20

GR 1907.34 33.00 1907.24 33.67 1907.14 34.33 1907.04 35.00 1907.03 35.94

GR 1907.02 36.88 1907.00 37.81 1906.99 38.75 1906.98 39.69 1906.97 40.62

GR 1906.95 41.56 1906.94 42.50 1906.93 43.44 1906.92 44.38 1906.90 45.31

GR 1906.89 46.25 1906.88 47.19 1906.87 48.12 1906.85 49.06 1906.84 50.00

GR 1906.85 50.93 1906.87 51.87 1906.88 52.80 1906.89 53.73 1906.91 54.67

GR 1906.92 55.60 1906.93 56.53 1906.95 57.47 1906.96 58.40 1906.97 59.33

GR 1906.99 60.27 1907.00 61.20 1907.01 62.13 1907.03 63.07 1907.04 64.00

GR 1907.11 64.75 1907.19 65.50 1907.26 66.25 1907.34 67.00 1907.96 67.75

GR 1908.59 68.50 1909.21 69.25 1909.84 70.00 1909.89 70.95 1909.94 71.90

GR	1909.98	72.86	1910.03	73.81	1910.08	74.76	1910.13	75.71	1910.17	76.67
GR	1910.22	77.62	1910.27	78.57	1910.32	79.52	1910.36	80.48	1910.41	81.43
GR	1910.46	82.38	1910.51	83.33	1910.55	84.29	1910.60	85.24	1910.65	86.19
GR	1910.70	87.14	1910.74	88.10	1910.79	89.05	1910.84	90.00		
X1	157.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	3.68	0.00
X3					80.00					
GR	1912.68	10.00	1912.63	10.95	1912.58	11.90	1912.53	12.85	1912.48	13.80
GR	1912.43	14.75	1912.38	15.70	1912.33	16.65	1912.28	17.60	1912.23	18.55
GR	1912.18	19.50	1912.13	20.45	1912.08	21.40	1912.03	22.35	1911.98	23.30
GR	1911.93	24.25	1911.88	25.20	1911.83	26.15	1911.78	27.10	1911.73	28.05
GR	1911.68	29.00	1911.18	29.80	1910.68	30.60	1910.18	31.40	1909.68	32.20
GR	1909.18	33.00	1909.08	33.67	1908.98	34.33	1908.88	35.00	1908.87	35.94
GR	1908.86	36.88	1908.84	37.81	1908.83	38.75	1908.82	39.69	1908.81	40.62
GR	1908.79	41.56	1908.78	42.50	1908.77	43.44	1908.76	44.38	1908.74	45.31
GR	1908.73	46.25	1908.72	47.19	1908.71	48.12	1908.69	49.06	1908.68	50.00
GR	1908.69	50.93	1908.71	51.87	1908.72	52.80	1908.73	53.73	1908.75	54.67
GR	1908.76	55.60	1908.77	56.53	1908.79	57.47	1908.80	58.40	1908.81	59.33
GR	1908.83	60.27	1908.84	61.20	1908.85	62.13	1908.87	63.07	1908.88	64.00
GR	1908.95	64.75	1909.03	65.50	1909.10	66.25	1909.18	67.00	1909.81	67.75
GR	1910.43	68.50	1911.06	69.25	1911.68	70.00	1911.70	70.95	1911.73	71.90
GR	1911.75	72.86	1911.78	73.81	1911.80	74.76	1911.82	75.71	1911.85	76.67
GR	1911.87	77.62	1911.89	78.57	1911.92	79.52	1911.94	80.48	1911.97	81.43
GR	1911.99	82.38	1912.01	83.33	1912.04	84.29	1912.06	85.24	1912.08	86.19
GR	1912.11	87.14	1912.13	88.10	1912.16	89.05	1912.18	90.00		
X1	158.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	5.53	0.00
X3					80.00					
GR	1913.53	10.00	1913.51	10.95	1913.48	11.90	1913.45	12.85	1913.43	13.80
GR	1913.40	14.75	1913.38	15.70	1913.35	16.65	1913.33	17.60	1913.30	18.55
GR	1913.28	19.50	1913.25	20.45	1913.23	21.40	1913.20	22.35	1913.18	23.30
GR	1913.15	24.25	1913.13	25.20	1913.10	26.15	1913.08	27.10	1913.05	28.05
GR	1913.03	29.00	1912.63	29.80	1912.23	30.60	1911.83	31.40	1911.43	32.20
GR	1911.03	33.00	1910.93	33.67	1910.83	34.33	1910.73	35.00	1910.72	35.94
GR	1910.71	36.88	1910.69	37.81	1910.68	38.75	1910.67	39.69	1910.66	40.62
GR	1910.64	41.56	1910.63	42.50	1910.62	43.44	1910.61	44.38	1910.59	45.31
GR	1910.58	46.25	1910.57	47.19	1910.56	48.12	1910.54	49.06	1910.53	50.00
GR	1910.54	50.93	1910.56	51.87	1910.57	52.80	1910.58	53.73	1910.60	54.67
GR	1910.61	55.60	1910.62	56.53	1910.64	57.47	1910.65	58.40	1910.66	59.33
GR	1910.68	60.27	1910.69	61.20	1910.70	62.13	1910.72	63.07	1910.73	64.00
GR	1910.80	64.75	1910.88	65.50	1910.95	66.25	1911.03	67.00	1911.53	67.75
GR	1912.03	68.50	1912.53	69.25	1913.03	70.00	1913.05	70.95	1913.08	71.90
GR	1913.10	72.86	1913.13	73.81	1913.15	74.76	1913.17	75.71	1913.20	76.67
GR	1913.22	77.62	1913.24	78.57	1913.27	79.52	1913.29	80.48	1913.32	81.43
GR	1913.34	82.38	1913.36	83.33	1913.39	84.29	1913.41	85.24	1913.43	86.19
GR	1913.46	87.14	1913.48	88.10	1913.51	89.05	1913.53	90.00		
X1	159.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	7.37	0.00
X3					80.00					
GR	1914.87	10.00	1914.84	10.95	1914.82	11.90	1914.79	12.85	1914.77	13.80
GR	1914.74	14.75	1914.72	15.70	1914.69	16.65	1914.67	17.60	1914.64	18.55
GR	1914.62	19.50	1914.59	20.45	1914.57	21.40	1914.54	22.35	1914.52	23.30
GR	1914.49	24.25	1914.47	25.20	1914.44	26.15	1914.42	27.10	1914.39	28.05
GR	1914.37	29.00	1914.07	29.80	1913.77	30.60	1913.47	31.40	1913.17	32.20
GR	1912.87	33.00	1912.80	33.75	1912.72	34.50	1912.65	35.25	1912.57	36.00
GR	1912.56	36.93	1912.54	37.87	1912.53	38.80	1912.52	39.73	1912.50	40.67
GR	1912.49	41.60	1912.48	42.53	1912.46	43.47	1912.45	44.40	1912.44	45.33
GR	1912.42	46.27	1912.41	47.20	1912.40	48.13	1912.38	49.07	1912.37	50.00
GR	1912.38	50.93	1912.40	51.86	1912.41	52.79	1912.43	53.71	1912.44	54.64
GR	1912.46	55.57	1912.47	56.50	1912.48	57.43	1912.50	58.36	1912.51	59.29
GR	1912.53	60.21	1912.54	61.14	1912.56	62.07	1912.57	63.00	1912.63	63.80
GR	1912.69	64.60	1912.75	65.40	1912.81	66.20	1912.87	67.00	1913.24	67.75
GR	1913.62	68.50	1913.99	69.25	1914.37	70.00	1914.39	70.95	1914.42	71.90
GR	1914.44	72.86	1914.47	73.81	1914.49	74.76	1914.51	75.71	1914.54	76.67
GR	1914.56	77.62	1914.58	78.57	1914.61	79.52	1914.63	80.48	1914.66	81.43

GR	1914.68	82.38	1914.70	83.33	1914.73	84.29	1914.75	85.24	1914.77	86.19
GR	1914.80	87.14	1914.82	88.10	1914.85	89.05	1914.87	90.00		
X1	160.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	9.21	0.00
X3					80.00					
GR	1916.21	10.00	1916.18	10.95	1916.16	11.90	1916.13	12.85	1916.11	13.80
GR	1916.08	14.75	1916.06	15.70	1916.03	16.65	1916.01	17.60	1915.98	18.55
GR	1915.96	19.50	1915.93	20.45	1915.91	21.40	1915.88	22.35	1915.86	23.30
GR	1915.83	24.25	1915.81	25.20	1915.78	26.15	1915.76	27.10	1915.73	28.05
GR	1915.71	29.00	1915.51	29.80	1915.31	30.60	1915.11	31.40	1914.91	32.20
GR	1914.71	33.00	1914.64	33.75	1914.56	34.50	1914.49	35.25	1914.41	36.00
GR	1914.40	36.93	1914.38	37.87	1914.37	38.80	1914.36	39.73	1914.34	40.67
GR	1914.33	41.60	1914.32	42.53	1914.30	43.47	1914.29	44.40	1914.28	45.33
GR	1914.26	46.27	1914.25	47.20	1914.24	48.13	1914.22	49.07	1914.21	50.00
GR	1914.23	50.92	1914.24	51.85	1914.26	52.77	1914.27	53.69	1914.29	54.62
GR	1914.30	55.54	1914.32	56.46	1914.33	57.38	1914.35	58.31	1914.36	59.23
GR	1914.38	60.15	1914.39	61.08	1914.41	62.00	1914.46	62.83	1914.51	63.67
GR	1914.56	64.50	1914.61	65.33	1914.66	66.17	1914.71	67.00	1914.96	67.75
GR	1915.21	68.50	1915.46	69.25	1915.71	70.00	1915.73	70.95	1915.76	71.90
GR	1915.78	72.86	1915.81	73.81	1915.83	74.76	1915.85	75.71	1915.88	76.67
GR	1915.90	77.62	1915.92	78.57	1915.95	79.52	1915.97	80.48	1916.00	81.43
GR	1916.02	82.38	1916.04	83.33	1916.07	84.29	1916.09	85.24	1916.11	86.19
GR	1916.14	87.14	1916.16	88.10	1916.19	89.05	1916.21	90.00		
X1	161.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	11.05	0.00
X3					80.00					
GR	1918.05	10.00	1918.08	10.95	1918.10	11.90	1918.13	12.85	1918.15	13.80
GR	1918.18	14.75	1918.20	15.70	1918.23	16.65	1918.25	17.60	1918.28	18.55
GR	1918.30	19.50	1918.33	20.45	1918.35	21.40	1918.38	22.35	1918.40	23.30
GR	1918.43	24.25	1918.45	25.20	1918.48	26.15	1918.50	27.10	1918.53	28.05
GR	1918.55	29.00	1918.15	29.80	1917.75	30.60	1917.35	31.40	1916.95	32.20
GR	1916.55	33.00	1916.49	33.80	1916.43	34.60	1916.37	35.40	1916.31	36.20
GR	1916.25	37.00	1916.24	37.93	1916.22	38.86	1916.21	39.79	1916.19	40.71
GR	1916.18	41.64	1916.16	42.57	1916.15	43.50	1916.14	44.43	1916.12	45.36
GR	1916.11	46.29	1916.09	47.21	1916.08	48.14	1916.06	49.07	1916.05	50.00
GR	1916.07	50.92	1916.08	51.83	1916.10	52.75	1916.12	53.67	1916.13	54.58
GR	1916.15	55.50	1916.17	56.42	1916.18	57.33	1916.20	58.25	1916.22	59.17
GR	1916.23	60.08	1916.25	61.00	1916.29	61.86	1916.34	62.71	1916.38	63.57
GR	1916.42	64.43	1916.46	65.29	1916.51	66.14	1916.55	67.00	1917.18	67.75
GR	1917.80	68.50	1918.43	69.25	1919.05	70.00	1919.10	70.95	1919.15	71.90
GR	1919.19	72.86	1919.24	73.81	1919.29	74.76	1919.34	75.71	1919.38	76.67
GR	1919.43	77.62	1919.48	78.57	1919.53	79.52	1919.57	80.48	1919.62	81.43
GR	1919.67	82.38	1919.72	83.33	1919.76	84.29	1919.81	85.24	1919.86	86.19
GR	1919.91	87.14	1919.95	88.10	1920.00	89.05	1920.05	90.00		
X1	162.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	12.89	0.00
X3					80.00					
GR	1920.39	10.00	1920.38	10.95	1920.37	11.90	1920.36	12.85	1920.35	13.80
GR	1920.34	14.75	1920.33	15.70	1920.32	16.65	1920.31	17.60	1920.30	18.55
GR	1920.29	19.50	1920.28	20.45	1920.27	21.40	1920.26	22.35	1920.25	23.30
GR	1920.24	24.25	1920.23	25.20	1920.22	26.15	1920.21	27.10	1920.20	28.05
GR	1920.19	29.00	1919.83	29.80	1919.47	30.60	1919.11	31.40	1918.75	32.20
GR	1918.39	33.00	1918.33	33.80	1918.27	34.60	1918.21	35.40	1918.15	36.20
GR	1918.09	37.00	1918.08	37.93	1918.06	38.86	1918.05	39.79	1918.03	40.71
GR	1918.02	41.64	1918.00	42.57	1917.99	43.50	1917.98	44.43	1917.96	45.36
GR	1917.95	46.29	1917.93	47.21	1917.92	48.14	1917.90	49.07	1917.89	50.00
GR	1917.91	50.91	1917.93	51.82	1917.94	52.73	1917.96	53.64	1917.98	54.55
GR	1918.00	55.45	1918.02	56.36	1918.04	57.27	1918.05	58.18	1918.07	59.09
GR	1918.09	60.00	1918.13	60.88	1918.16	61.75	1918.20	62.62	1918.24	63.50
GR	1918.28	64.38	1918.31	65.25	1918.35	66.12	1918.39	67.00	1919.02	67.75
GR	1919.64	68.50	1920.27	69.25	1920.89	70.00	1920.91	70.95	1920.94	71.90
GR	1920.96	72.86	1920.99	73.81	1921.01	74.76	1921.03	75.71	1921.06	76.67
GR	1921.08	77.62	1921.10	78.57	1921.13	79.52	1921.15	80.48	1921.18	81.43
GR	1921.20	82.38	1921.22	83.33	1921.25	84.29	1921.27	85.24	1921.29	86.19
GR	1921.32	87.14	1921.34	88.10	1921.37	89.05	1921.39	90.00		

X1	163.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	14.74	0.00
X3							80.00			
GR	1922.74	10.00	1922.69	10.95	1922.64	11.90	1922.59	12.85	1922.54	13.80
GR	1922.49	14.75	1922.44	15.70	1922.39	16.65	1922.34	17.60	1922.29	18.55
GR	1922.24	19.50	1922.19	20.45	1922.14	21.40	1922.09	22.35	1922.04	23.30
GR	1921.99	24.25	1921.94	25.20	1921.89	26.15	1921.84	27.10	1921.79	28.05
GR	1921.74	29.00	1921.44	29.80	1921.14	30.60	1920.84	31.40	1920.54	32.20
GR	1920.24	33.00	1920.19	33.83	1920.14	34.67	1920.09	35.50	1920.04	36.33
GR	1919.99	37.17	1919.94	38.00	1919.92	38.92	1919.91	39.85	1919.89	40.77
GR	1919.88	41.69	1919.86	42.62	1919.85	43.54	1919.83	44.46	1919.82	45.38
GR	1919.80	46.31	1919.79	47.23	1919.77	48.15	1919.76	49.08	1919.74	50.00
GR	1919.76	50.91	1919.78	51.82	1919.79	52.73	1919.81	53.64	1919.83	54.55
GR	1919.85	55.45	1919.87	56.36	1919.89	57.27	1919.90	58.18	1919.92	59.09
GR	1919.94	60.00	1919.98	60.88	1920.01	61.75	1920.05	62.62	1920.09	63.50
GR	1920.13	64.38	1920.16	65.25	1920.20	66.12	1920.24	67.00	1920.74	67.75
GR	1921.24	68.50	1921.74	69.25	1922.24	70.00	1922.26	70.95	1922.29	71.90
GR	1922.31	72.86	1922.34	73.81	1922.36	74.76	1922.38	75.71	1922.41	76.67
GR	1922.43	77.62	1922.45	78.57	1922.48	79.52	1922.50	80.48	1922.53	81.43
GR	1922.55	82.38	1922.57	83.33	1922.60	84.29	1922.62	85.24	1922.64	86.19
GR	1922.67	87.14	1922.69	88.10	1922.72	89.05	1922.74	90.00		
X1	164.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	16.58	0.00
X3						80.00				
GR	1924.08	10.00	1924.06	10.95	1924.05	11.90	1924.03	12.85	1924.02	13.80
GR	1924.00	14.75	1923.99	15.70	1923.97	16.65	1923.96	17.60	1923.94	18.55
GR	1923.93	19.50	1923.91	20.45	1923.90	21.40	1923.88	22.35	1923.87	23.30
GR	1923.85	24.25	1923.84	25.20	1923.82	26.15	1923.81	27.10	1923.79	28.05
GR	1923.78	29.00	1923.44	29.80	1923.10	30.60	1922.76	31.40	1922.42	32.20
GR	1922.08	33.00	1922.03	33.83	1921.98	34.67	1921.93	35.50	1921.88	36.33
GR	1921.83	37.17	1921.78	38.00	1921.76	38.92	1921.75	39.85	1921.73	40.77
GR	1921.72	41.69	1921.70	42.62	1921.69	43.54	1921.67	44.46	1921.66	45.38
GR	1921.64	46.31	1921.63	47.23	1921.61	48.15	1921.60	49.08	1921.58	50.00
GR	1921.60	50.91	1921.62	51.82	1921.63	52.73	1921.65	53.64	1921.67	54.55
GR	1921.69	55.45	1921.71	56.36	1921.73	57.27	1921.74	58.18	1921.76	59.09
GR	1921.78	60.00	1921.82	60.88	1921.85	61.75	1921.89	62.62	1921.93	63.50
GR	1921.97	64.38	1922.00	65.25	1922.04	66.12	1922.08	67.00	1922.45	67.75
GR	1922.83	68.50	1923.20	69.25	1923.58	70.00	1923.60	70.95	1923.63	71.90
GR	1923.65	72.86	1923.68	73.81	1923.70	74.76	1923.72	75.71	1923.75	76.67
GR	1923.77	77.62	1923.79	78.57	1923.82	79.52	1923.84	80.48	1923.87	81.43
GR	1923.89	82.38	1923.91	83.33	1923.94	84.29	1923.96	85.24	1923.98	86.19
GR	1924.01	87.14	1924.03	88.10	1924.06	89.05	1924.08	90.00		
X1	165.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	18.42	0.00
X3					80.00					
GR	1925.42	10.00	1925.40	10.95	1925.37	11.90	1925.34	12.85	1925.32	13.80
GR	1925.29	14.75	1925.27	15.70	1925.24	16.65	1925.22	17.60	1925.19	18.55
GR	1925.17	19.50	1925.14	20.45	1925.12	21.40	1925.09	22.35	1925.07	23.30
GR	1925.04	24.25	1925.02	25.20	1924.99	26.15	1924.97	27.10	1924.94	28.05
GR	1924.92	29.00	1924.72	29.80	1924.52	30.60	1924.32	31.40	1924.12	32.20
GR	1923.92	33.00	1923.87	33.83	1923.82	34.67	1923.77	35.50	1923.72	36.33
GR	1923.67	37.17	1923.62	38.00	1923.60	38.92	1923.59	39.85	1923.57	40.77
GR	1923.56	41.69	1923.54	42.62	1923.53	43.54	1923.51	44.46	1923.50	45.38
GR	1923.48	46.31	1923.47	47.23	1923.45	48.15	1923.44	49.08	1923.42	50.00
GR	1923.44	50.90	1923.46	51.80	1923.48	52.70	1923.50	53.60	1923.52	54.50
GR	1923.54	55.40	1923.56	56.30	1923.58	57.20	1923.60	58.10	1923.62	59.00
GR	1923.65	59.89	1923.69	60.78	1923.72	61.67	1923.75	62.56	1923.79	63.44
GR	1923.82	64.33	1923.85	65.22	1923.89	66.11	1923.92	67.00	1924.05	67.75
GR	1924.17	68.50	1924.30	69.25	1924.42	70.00	1924.44	70.95	1924.47	71.90
GR	1924.49	72.86	1924.52	73.81	1924.54	74.76	1924.56	75.71	1924.59	76.67
GR	1924.61	77.62	1924.63	78.57	1924.66	79.52	1924.68	80.48	1924.71	81.43
GR	1924.73	82.38	1924.75	83.33	1924.78	84.29	1924.80	85.24	1924.82	86.19
GR	1924.85	87.14	1924.87	88.10	1924.90	89.05	1924.92	90.00		
X1	166.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	20.26	0.00
X3					80.00					

GR	1927.26	10.00	1927.21	10.95	1927.16	11.90	1927.11	12.85	1927.06	13.80
GR	1927.01	14.75	1926.96	15.70	1926.91	16.65	1926.86	17.60	1926.81	18.55
GR	1926.76	19.50	1926.71	20.45	1926.66	21.40	1926.61	22.35	1926.56	23.30
GR	1926.51	24.25	1926.46	25.20	1926.41	26.15	1926.36	27.10	1926.31	28.05
GR	1926.26	29.00	1926.16	29.80	1926.06	30.60	1925.96	31.40	1925.86	32.20
GR	1925.76	33.00	1925.72	33.86	1925.67	34.71	1925.63	35.57	1925.59	36.43
GR	1925.55	37.29	1925.50	38.14	1925.46	39.00	1925.44	39.92	1925.43	40.83
GR	1925.41	41.75	1925.39	42.67	1925.38	43.58	1925.36	44.50	1925.34	45.42
GR	1925.33	46.33	1925.31	47.25	1925.29	48.17	1925.28	49.08	1925.26	50.00
GR	1925.28	50.90	1925.30	51.80	1925.32	52.70	1925.34	53.60	1925.36	54.50
GR	1925.38	55.40	1925.40	56.30	1925.42	57.20	1925.44	58.10	1925.46	59.00
GR	1925.49	59.89	1925.53	60.78	1925.56	61.67	1925.59	62.56	1925.63	63.44
GR	1925.66	64.33	1925.69	65.22	1925.73	66.11	1925.76	67.00	1925.89	67.75
GR	1926.01	68.50	1926.14	69.25	1926.26	70.00	1926.28	70.95	1926.31	71.90
GR	1926.33	72.86	1926.36	73.81	1926.38	74.76	1926.40	75.71	1926.43	76.67
GR	1926.45	77.62	1926.47	78.57	1926.50	79.52	1926.52	80.48	1926.55	81.43
GR	1926.57	82.38	1926.59	83.33	1926.62	84.29	1926.64	85.24	1926.66	86.19
GR	1926.69	87.14	1926.71	88.10	1926.74	89.05	1926.76	90.00		
X1	167.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	22.11	0.00
X3						80.00				
GR	1928.61	10.00	1928.58	10.95	1928.56	11.90	1928.53	12.85	1928.51	13.80
GR	1928.48	14.75	1928.46	15.70	1928.43	16.65	1928.41	17.60	1928.38	18.55
GR	1928.36	19.50	1928.33	20.45	1928.31	21.40	1928.28	22.35	1928.26	23.30
GR	1928.23	24.25	1928.21	25.20	1928.18	26.15	1928.16	27.10	1928.13	28.05
GR	1928.11	29.00	1928.01	29.80	1927.91	30.60	1927.81	31.40	1927.71	32.20
GR	1927.61	33.00	1927.57	33.86	1927.52	34.71	1927.48	35.57	1927.44	36.43
GR	1927.40	37.29	1927.35	38.14	1927.31	39.00	1927.29	39.92	1927.28	40.83
GR	1927.26	41.75	1927.24	42.67	1927.23	43.58	1927.21	44.50	1927.19	45.42
GR	1927.18	46.33	1927.16	47.25	1927.14	48.17	1927.13	49.08	1927.11	50.00
GR	1927.13	50.89	1927.15	51.78	1927.18	52.67	1927.20	53.56	1927.22	54.44
GR	1927.24	55.33	1927.27	56.22	1927.29	57.11	1927.31	58.00	1927.34	58.90
GR	1927.37	59.80	1927.40	60.70	1927.43	61.60	1927.46	62.50	1927.49	63.40
GR	1927.52	64.30	1927.55	65.20	1927.58	66.10	1927.61	67.00	1927.81	67.75
GR	1928.01	68.50	1928.21	69.25	1928.41	70.00	1928.42	70.95	1928.43	71.90
GR	1928.44	72.86	1928.45	73.81	1928.46	74.76	1928.47	75.71	1928.48	76.67
GR	1928.49	77.62	1928.50	78.57	1928.51	79.52	1928.51	80.48	1928.52	81.43
GR	1928.53	82.38	1928.54	83.33	1928.55	84.29	1928.56	85.24	1928.57	86.19
GR	1928.58	87.14	1928.59	88.10	1928.60	89.05	1928.61	90.00		
X1	168.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	23.95	0.00
X3						80.00				
GR	1930.45	10.00	1930.42	10.95	1930.40	11.90	1930.37	12.85	1930.35	13.80
GR	1930.32	14.75	1930.30	15.70	1930.27	16.65	1930.25	17.60	1930.22	18.55
GR	1930.20	19.50	1930.17	20.45	1930.15	21.40	1930.12	22.35	1930.10	23.30
GR	1930.07	24.25	1930.05	25.20	1930.02	26.15	1930.00	27.10	1929.97	28.05
GR	1929.95	29.00	1929.85	29.80	1929.75	30.60	1929.65	31.40	1929.55	32.20
GR	1929.45	33.00	1929.41	33.88	1929.38	34.75	1929.34	35.62	1929.30	36.50
GR	1929.26	37.38	1929.23	38.25	1929.19	39.12	1929.15	40.00	1929.13	40.91
GR	1929.11	41.82	1929.10	42.73	1929.08	43.64	1929.06	44.55	1929.04	45.45
GR	1929.02	46.36	1929.00	47.27	1928.99	48.18	1928.97	49.09	1928.95	50.00
GR	1928.98	50.86	1929.01	51.71	1929.04	52.57	1929.06	53.43	1929.09	54.29
GR	1929.12	55.14	1929.15	56.00	1929.17	56.92	1929.20	57.83	1929.22	58.75
GR	1929.25	59.67	1929.28	60.58	1929.30	61.50	1929.33	62.42	1929.35	63.33
GR	1929.38	64.25	1929.40	65.17	1929.43	66.08	1929.45	67.00	1929.65	67.75
GR	1929.85	68.50	1930.05	69.25	1930.25	70.00	1930.26	70.95	1930.27	71.90
GR	1930.28	72.86	1930.29	73.81	1930.30	74.76	1930.31	75.71	1930.32	76.67
GR	1930.33	77.62	1930.34	78.57	1930.35	79.52	1930.35	80.48	1930.36	81.43
GR	1930.37	82.38	1930.38	83.33	1930.39	84.29	1930.40	85.24	1930.41	86.19
GR	1930.42	87.14	1930.43	88.10	1930.44	89.05	1930.45	90.00		
X1	169.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	25.79	0.00
X3						80.00				
GR	1932.29	10.00	1932.27	10.95	1932.24	11.90	1932.21	12.85	1932.19	13.80
GR	1932.16	14.75	1932.14	15.70	1932.11	16.65	1932.09	17.60	1932.06	18.55

GR	1932.04	19.50	1932.01	20.45	1931.99	21.40	1931.96	22.35	1931.94	23.30
GR	1931.91	24.25	1931.89	25.20	1931.86	26.15	1931.84	27.10	1931.81	28.05
GR	1931.79	29.00	1931.69	29.80	1931.59	30.60	1931.49	31.40	1931.39	32.20
GR	1931.29	33.00	1931.26	33.89	1931.22	34.78	1931.19	35.67	1931.16	36.56
GR	1931.12	37.44	1931.09	38.33	1931.06	39.22	1931.02	40.11	1930.99	41.00
GR	1930.97	41.90	1930.95	42.80	1930.93	43.70	1930.91	44.60	1930.89	45.50
GR	1930.87	46.40	1930.85	47.30	1930.83	48.20	1930.81	49.10	1930.79	50.00
GR	1930.82	50.86	1930.85	51.71	1930.88	52.57	1930.90	53.43	1930.93	54.29
GR	1930.96	55.14	1930.99	56.00	1931.02	56.92	1931.04	57.83	1931.07	58.75
GR	1931.09	59.67	1931.12	60.58	1931.14	61.50	1931.17	62.42	1931.19	63.33
GR	1931.22	64.25	1931.24	65.17	1931.27	66.08	1931.29	67.00	1931.49	67.75
GR	1931.69	68.50	1931.89	69.25	1932.09	70.00	1932.10	70.95	1932.11	71.90
GR	1932.12	72.86	1932.13	73.81	1932.14	74.76	1932.15	75.71	1932.16	76.67
GR	1932.17	77.62	1932.18	78.57	1932.19	79.52	1932.19	80.48	1932.20	81.43
GR	1932.21	82.38	1932.22	83.33	1932.23	84.29	1932.24	85.24	1932.25	86.19
GR	1932.26	87.14	1932.27	88.10	1932.28	89.05	1932.29	90.00		
X1	170.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	27.63	0.00
X3						80.00				
GR	1934.03	10.00	1934.01	10.95	1933.99	11.90	1933.97	12.85	1933.95	13.80
GR	1933.93	14.75	1933.91	15.70	1933.89	16.65	1933.87	17.60	1933.85	18.55
GR	1933.83	19.50	1933.81	20.45	1933.79	21.40	1933.77	22.35	1933.75	23.30
GR	1933.73	24.25	1933.71	25.20	1933.69	26.15	1933.67	27.10	1933.65	28.05
GR	1933.63	29.00	1933.53	29.80	1933.43	30.60	1933.33	31.40	1933.23	32.20
GR	1933.13	33.00	1933.10	33.89	1933.06	34.78	1933.03	35.67	1933.00	36.56
GR	1932.96	37.44	1932.93	38.33	1932.90	39.22	1932.86	40.11	1932.83	41.00
GR	1932.81	41.90	1932.79	42.80	1932.77	43.70	1932.75	44.60	1932.73	45.50
GR	1932.71	46.40	1932.69	47.30	1932.67	48.20	1932.65	49.10	1932.63	50.00
GR	1932.66	50.86	1932.69	51.71	1932.72	52.57	1932.74	53.43	1932.77	54.29
GR	1932.80	55.14	1932.83	56.00	1932.85	56.92	1932.88	57.83	1932.91	58.75
GR	1932.93	59.67	1932.96	60.58	1932.98	61.50	1933.01	62.42	1933.03	63.33
GR	1933.06	64.25	1933.08	65.17	1933.11	66.08	1933.13	67.00	1933.33	67.75
GR	1933.53	68.50	1933.73	69.25	1933.93	70.00	1933.93	70.95	1933.92	71.90
GR	1933.92	72.86	1933.91	73.81	1933.91	74.76	1933.90	75.71	1933.90	76.67
GR	1933.89	77.62	1933.89	78.57	1933.88	79.52	1933.88	80.48	1933.87	81.43
GR	1933.87	82.38	1933.86	83.33	1933.86	84.29	1933.85	85.24	1933.85	86.19
GR	1933.84	87.14	1933.84	88.10	1933.83	89.05	1933.83	90.00		
X1	171.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	29.47	0.00
X3						75.00				
GR	1935.77	10.00	1935.76	10.95	1935.74	11.90	1935.72	12.85	1935.71	13.80
GR	1935.69	14.75	1935.68	15.70	1935.66	16.65	1935.65	17.60	1935.63	18.55
GR	1935.62	19.50	1935.60	20.45	1935.59	21.40	1935.57	22.35	1935.56	23.30
GR	1935.54	24.25	1935.53	25.20	1935.51	26.15	1935.50	27.10	1935.48	28.05
GR	1935.47	29.00	1935.37	29.80	1935.27	30.60	1935.17	31.40	1935.07	32.20
GR	1934.97	33.00	1934.94	33.90	1934.91	34.80	1934.88	35.70	1934.85	36.60
GR	1934.82	37.50	1934.79	38.40	1934.76	39.30	1934.73	40.20	1934.70	41.10
GR	1934.67	42.00	1934.65	42.89	1934.63	43.78	1934.60	44.67	1934.58	45.56
GR	1934.56	46.44	1934.54	47.33	1934.51	48.22	1934.49	49.11	1934.47	50.00
GR	1934.50	50.83	1934.54	51.67	1934.57	52.50	1934.60	53.33	1934.64	54.17
GR	1934.67	55.00	1934.69	55.92	1934.72	56.85	1934.74	57.77	1934.76	58.69
GR	1934.79	59.62	1934.81	60.54	1934.83	61.46	1934.85	62.38	1934.88	63.31
GR	1934.90	64.23	1934.92	65.15	1934.95	66.08	1934.97	67.00	1935.09	67.75
GR	1935.22	68.50	1935.34	69.25	1935.47	70.00	1935.49	70.94	1935.52	71.88
GR	1935.55	72.81	1935.57	73.75	1935.60	74.69	1935.62	75.62	1935.65	76.56
GR	1935.67	77.50	1935.70	78.44	1935.72	79.38	1935.75	80.31	1935.77	81.25
GR	1935.80	82.19	1935.82	83.12	1935.85	84.06	1935.87	85.00		
X1	172.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	31.32	0.00
X3						70.00				
GR	1937.52	10.00	1937.51	10.95	1937.50	11.90	1937.49	12.85	1937.48	13.80
GR	1937.47	14.75	1937.46	15.70	1937.45	16.65	1937.44	17.60	1937.43	18.55
GR	1937.42	19.50	1937.41	20.45	1937.40	21.40	1937.39	22.35	1937.38	23.30
GR	1937.37	24.25	1937.36	25.20	1937.35	26.15	1937.34	27.10	1937.33	28.05
GR	1937.32	29.00	1937.22	29.80	1937.12	30.60	1937.02	31.40	1936.92	32.20

GR	1936.82	33.00	1936.79	33.91	1936.77	34.82	1936.74	35.73	1936.71	36.64
GR	1936.68	37.55	1936.66	38.45	1936.63	39.36	1936.60	40.27	1936.57	41.18
GR	1936.55	42.09	1936.52	43.00	1936.49	43.88	1936.47	44.75	1936.44	45.62
GR	1936.42	46.50	1936.39	47.38	1936.37	48.25	1936.34	49.12	1936.32	50.00
GR	1936.35	50.83	1936.39	51.67	1936.42	52.50	1936.45	53.33	1936.49	54.17
GR	1936.52	55.00	1936.54	55.92	1936.57	56.85	1936.59	57.77	1936.61	58.69
GR	1936.64	59.62	1936.66	60.54	1936.68	61.46	1936.70	62.38	1936.73	63.31
GR	1936.75	64.23	1936.77	65.15	1936.80	66.08	1936.82	67.00	1936.94	67.75
GR	1937.07	68.50	1937.19	69.25	1937.32	70.00	1937.34	70.91	1937.36	71.82
GR	1937.37	72.73	1937.39	73.64	1937.41	74.55	1937.43	75.45	1937.45	76.36
GR	1937.47	77.27	1937.48	78.18	1937.50	79.09	1937.52	80.00		
X1	173.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	33.16	0.00
X3					70.00					
GR	1939.46	10.00	1939.45	10.95	1939.44	11.90	1939.43	12.85	1939.42	13.80
GR	1939.41	14.75	1939.40	15.70	1939.39	16.65	1939.38	17.60	1939.37	18.55
GR	1939.36	19.50	1939.35	20.45	1939.34	21.40	1939.33	22.35	1939.32	23.30
GR	1939.31	24.25	1939.30	25.20	1939.29	26.15	1939.28	27.10	1939.27	28.05
GR	1939.26	29.00	1939.14	29.80	1939.02	30.60	1938.90	31.40	1938.78	32.20
GR	1938.66	33.00	1938.64	33.92	1938.61	34.83	1938.58	35.75	1938.56	36.67
GR	1938.53	37.58	1938.51	38.50	1938.48	39.42	1938.46	40.33	1938.43	41.25
GR	1938.41	42.17	1938.38	43.08	1938.36	44.00	1938.33	44.86	1938.30	45.71
GR	1938.27	46.57	1938.25	47.43	1938.22	48.29	1938.19	49.14	1938.16	50.00
GR	1938.19	50.83	1938.23	51.67	1938.26	52.50	1938.29	53.33	1938.33	54.17
GR	1938.36	55.00	1938.38	55.92	1938.41	56.85	1938.43	57.77	1938.45	58.69
GR	1938.48	59.62	1938.50	60.54	1938.52	61.46	1938.54	62.38	1938.57	63.31
GR	1938.59	64.23	1938.61	65.15	1938.64	66.08	1938.66	67.00	1938.81	67.75
GR	1938.96	68.50	1939.11	69.25	1939.26	70.00	1939.27	70.91	1939.28	71.82
GR	1939.29	72.73	1939.30	73.64	1939.31	74.55	1939.31	75.45	1939.32	76.36
GR	1939.33	77.27	1939.34	78.18	1939.35	79.09	1939.36	80.00		
X1	174.00	9.00	12.00	28.00	0.00	0.00	100.00	0.00	35.00	0.00
X3					70.00					
GR	1941.00	10.00	1941.00	10.95	1941.00	11.90	1941.00	12.85	1941.00	13.80
GR	1941.00	14.75	1941.00	15.70	1941.00	16.65	1941.00	17.60	1941.00	18.55
GR	1941.00	19.50	1941.00	20.45	1941.00	21.40	1941.00	22.35	1941.00	23.30
GR	1941.00	24.25	1941.00	25.20	1941.00	26.15	1941.00	27.10	1941.00	28.05
GR	1941.00	29.00	1940.90	29.80	1940.80	30.60	1940.70	31.40	1940.60	32.20
GR	1940.50	33.00	1940.48	33.92	1940.45	34.85	1940.43	35.77	1940.41	36.69
GR	1940.38	37.62	1940.36	38.54	1940.34	39.46	1940.32	40.38	1940.29	41.31
GR	1940.27	42.23	1940.25	43.15	1940.22	44.08	1940.20	45.00	1940.17	45.83
GR	1940.13	46.67	1940.10	47.50	1940.07	48.33	1940.03	49.17	1940.00	50.00
GR	1940.03	50.83	1940.07	51.67	1940.10	52.50	1940.13	53.33	1940.17	54.17
GR	1940.20	55.00	1940.22	55.92	1940.25	56.85	1940.27	57.77	1940.29	58.69
GR	1940.32	59.62	1940.34	60.54	1940.36	61.46	1940.38	62.38	1940.41	63.31
GR	1940.43	64.23	1940.45	65.15	1940.48	66.08	1940.50	67.00	1940.62	67.75
GR	1940.75	68.50	1940.88	69.25	1941.00	70.00	1941.02	70.91	1941.04	71.82
GR	1941.05	72.73	1941.07	73.64	1941.09	74.55	1941.11	75.45	1941.13	76.36
GR	1941.15	77.27	1941.16	78.18	1941.18	79.09	1941.20	80.00		
GS	0.13	0.14	0.26	0.20	0.45	0.20	0.73	0.20	2.20	0.26
EJ	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

1

## TI INITIAL BED MATERIAL COMPOSITION

SECTION	SIZE MM	FRACTION								
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155.00 0.13 0.139 0.26 0.200 0.45 0.200 0.73 0.200 2.20 0.261

156.00 0.13 0.139 0.26 0.200 0.45 0.200 0.73 0.200 2.20 0.261

157.00 0.13 0.139 0.26 0.200 0.45 0.200 0.73 0.200 2.20 0.261

158.00 0.13 0.139 0.26 0.200 0.45 0.200 0.73 0.200 2.20 0.261

159.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
160.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
161.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
162.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
163.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
164.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
165.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
166.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
167.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
168.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
169.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
170.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
171.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
172.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
173.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261
174.00	0.13	0.139	0.26	0.200	0.45	0.200	0.73	0.200	2.20	0.261

## THE ENGELUND-HANSEN SEDIMENT FORMULA IS USED

1

TIME = 1.00 HRS DT = 100 SECS TIME STEP = 0

SECTION	W.S.ELEV.	WIDTH	DEPTH	Q	V	SLOPE	D50	QS/Q	FR	SED. YIELD
FT	FT	FT	CFS	FPS	MM	1000 PPM	TONS			

155.000	1907.25	38.9	2.25	200	2.62	0.001186	0.51	1.49	0.33	0.930E+00
156.000	1908.05	36.0	1.21	200	5.39	0.011563	0.49	14.10	0.94	0.880E+01
157.000	1909.84	35.9	1.16	200	5.63	0.013276	0.55	25.62	1.00	0.160E+02
158.000	1911.76	36.5	1.23	200	5.27	0.010925	0.54	17.78	0.91	0.111E+02
159.000	1913.63	37.5	1.26	200	5.14	0.010370	0.51	13.97	0.89	0.872E+01
160.000	1915.46	39.2	1.25	200	5.14	0.010957	0.53	16.35	0.91	0.102E+02
161.000	1917.32	36.5	1.27	200	5.23	0.010622	0.51	14.72	0.90	0.918E+01
162.000	1919.16	36.6	1.27	200	5.25	0.010853	0.54	17.43	0.91	0.109E+02
163.000	1921.03	37.3	1.29	200	5.16	0.010467	0.51	13.99	0.89	0.873E+01
164.000	1922.85	37.4	1.27	200	5.24	0.011008	0.52	17.09	0.91	0.107E+02
165.000	1924.75	53.5	1.33	200	4.56	0.011111	0.57	15.14	0.89	0.945E+01
166.000	1926.58	59.7	1.32	200	4.46	0.011912	0.49	8.60	0.91	0.537E+01
167.000	1928.36	50.5	1.25	200	5.02	0.014168	0.55	22.41	1.00	0.140E+02
168.000	1930.25	52.6	1.30	200	4.82	0.013033	0.49	16.17	0.96	0.101E+02
169.000	1932.13	58.4	1.34	200	4.59	0.012723	0.58	18.84	0.94	0.118E+02
170.000	1934.04	78.7	1.41	200	3.93	0.011303	0.51	7.55	0.86	0.471E+01
171.000	1935.78	70.8	1.31	200	4.48	0.015142	0.39	15.03	0.99	0.938E+01
172.000	1937.70	69.1	1.38	200	3.96	0.009704	0.49	22.93	0.82	0.143E+02
173.000	1939.57	69.0	1.41	200	4.04	0.010422	0.44	26.65	0.84	0.166E+02
174.000	1941.27	69.0	1.27	200	4.51	0.015023	0.52	46.54	0.99	0.290E+02

ID

1 SECTION 155.00 TIME = 1.00 HRS WS = 1907.25 WIDTH = 38.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1909.00	0.00	0.00	10.0	1908.95	0.00	0.00	10.9	1908.90	0.00	0.00	11.9
1908.85	0.00	0.00	12.8	1908.80	0.00	0.00	13.8	1908.75	0.00	0.00	14.7
1908.70	0.00	0.00	15.7	1908.65	0.00	0.00	16.6	1908.60	0.00	0.00	17.6
1908.55	0.00	0.00	18.6	1908.50	0.00	0.00	19.5	1908.45	0.00	0.00	20.5
1908.40	0.00	0.00	21.4	1908.35	0.00	0.00	22.4	1908.30	0.00	0.00	23.3
1908.25	0.00	0.00	24.3	1908.20	0.00	0.00	25.2	1908.15	0.00	0.00	26.2
1908.10	0.00	0.00	27.1	1908.05	0.00	0.00	28.1	1908.00	0.00	0.00	29.0
1907.50	0.00	0.00	29.8	1907.00	0.00	0.00	30.6	1906.50	0.00	0.00	31.4
1906.00	0.08	0.00	32.2	1905.50	0.05	0.00	33.0	1905.40	0.03	0.00	33.7
1905.30	0.03	0.00	34.3	1905.20	0.03	0.00	35.0	1905.19	0.03	0.00	35.9
1905.18	0.03	0.00	36.9	1905.16	0.03	0.00	37.8	1905.15	0.03	0.00	38.8
1905.14	0.03	0.00	39.7	1905.13	0.03	0.00	40.6	1905.11	0.03	0.00	41.6
1905.10	0.04	0.00	42.5	1905.09	0.04	0.00	43.4	1905.08	0.04	0.00	44.4
1905.06	0.04	0.00	45.3	1905.05	0.04	0.00	46.2	1905.04	0.04	0.00	47.2
1905.03	0.04	0.00	48.1	1905.01	0.04	0.00	49.1	1905.00	0.04	0.00	50.0
1905.01	0.04	0.00	50.9	1905.02	0.04	0.00	51.9	1905.04	0.04	0.00	52.8
1905.05	0.04	0.00	53.8	1905.06	0.04	0.00	54.7	1905.07	0.04	0.00	55.6
1905.09	0.04	0.00	56.6	1905.10	0.04	0.00	57.5	1905.11	0.03	0.00	58.4
1905.12	0.03	0.00	59.4	1905.14	0.03	0.00	60.3	1905.15	0.03	0.00	61.2
1905.16	0.03	0.00	62.2	1905.17	0.03	0.00	63.1	1905.19	0.03	0.00	64.1
1905.20	0.03	0.00	65.0	1905.30	0.03	0.00	65.7	1905.40	0.03	0.00	66.3
1905.50	0.13	0.00	67.0	1906.12	0.03	0.00	67.8	1906.75	0.02	0.00	68.5
1907.38	0.02	0.00	69.2	1908.00	-0.06	0.00	70.0	1908.05	0.00	0.00	71.0
1908.10	0.00	0.00	71.9	1908.14	0.00	0.00	72.9	1908.19	0.00	0.00	73.8
1908.24	0.00	0.00	74.8	1908.29	0.00	0.00	75.7	1908.33	0.00	0.00	76.7
1908.38	0.00	0.00	77.6	1908.43	0.00	0.00	78.6	1908.48	0.00	0.00	79.5
1908.52	0.00	0.00	80.5	1908.57	0.00	0.00	81.4	1908.62	0.00	0.00	82.4
1908.67	0.00	0.00	83.3	1908.71	0.00	0.00	84.3	1908.76	0.00	0.00	85.2
1908.81	0.00	0.00	86.2	1908.86	0.00	0.00	87.1	1908.90	0.00	0.00	88.1
1908.95	0.00	0.00	89.0	1909.00	0.00	0.00	90.0				

1

TIME = 10.38 HRS DT = 120 SECS TIME STEP = 300

SECTION	W.S.ELEV.	WIDTH	DEPTH	Q	V	SLOPE	D50	QS/Q	FR	SED.	YIELD
FT	FT	FT	CFS	FPS	MM	1000 PPM	TONS				

155.000	1907.08	38.4	2.08	160	2.31	0.001019	0.51	1.13	0.30	0.281E+03
156.000	1907.18	19.8	1.62	160	5.84	0.009550	0.58	12.69	0.87	0.286E+04
157.000	1910.16	39.3	1.27	160	4.99	0.013317	0.72	18.24	0.97	0.281E+04
158.000	1911.60	39.9	1.08	160	4.53	0.009886	0.56	8.78	0.85	0.285E+04
159.000	1912.87	40.5	0.92	160	4.65	0.010985	0.63	12.67	0.89	0.283E+04
160.000	1915.87	45.9	0.90	160	4.45	0.011246	0.63	10.24	0.89	0.269E+04
161.000	1917.65	44.3	0.90	160	4.40	0.010300	0.54	10.70	0.85	0.282E+04
162.000	1918.95	41.4	0.87	160	4.74	0.012080	0.55	12.41	0.92	0.287E+04
163.000	1920.85	43.1	0.86	160	4.58	0.011338	0.59	15.69	0.89	0.284E+04
164.000	1921.97	41.4	0.90	160	4.54	0.010467	0.51	8.53	0.86	0.281E+04
165.000	1924.34	48.4	0.94	160	4.45	0.012023	0.61	16.75	0.91	0.264E+04
166.000	1925.39	38.4	1.17	160	4.39	0.008500	0.58	7.07	0.79	0.258E+04
167.000	1928.46	73.0	1.33	160	3.63	0.010450	0.45	9.25	0.82	0.246E+04
168.000	1930.86	77.7	1.35	160	3.79	0.013186	0.51	10.26	0.91	0.247E+04
169.000	1932.06	62.9	1.07	160	4.23	0.014313	0.75	15.08	0.96	0.271E+04
170.000	1934.29	77.8	1.26	160	3.55	0.010577	0.38	5.91	0.82	0.273E+04
171.000	1935.26	45.2	0.99	160	4.45	0.010908	0.53	17.33	0.88	0.287E+04
172.000	1939.36	69.3	1.33	160	3.62	0.009691	0.38	7.30	0.80	0.284E+04
173.000	1940.35	63.6	1.26	160	3.83	0.010418	0.32	12.16	0.83	0.346E+04
174.000	1941.32	68.9	1.32	160	3.38	0.007669	0.52	13.18	0.72	0.378E+04

## ID

19 SECTION 173.00 TIME = 10.38 HRS WS =1940.35 WIDTH = 63.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1940.63	0.00	0.00	10.0	1940.37	0.00	0.92	10.9	1940.37	0.00	0.93	11.9
1940.36	0.00	0.93	12.8	1940.36	0.00	0.94	13.8	1940.35	0.00	0.94	14.7
1940.35	0.00	0.95	15.7	1940.34	0.00	0.95	16.6	1940.34	0.00	0.96	17.6
1940.32	0.00	0.95	18.6	1940.31	0.00	0.95	19.5	1940.30	0.00	0.95	20.5
1940.30	0.00	0.96	21.4	1940.30	0.00	0.97	22.4	1940.29	0.00	0.97	23.3
1940.28	0.00	0.97	24.3	1940.27	0.00	0.97	25.2	1940.26	0.00	0.97	26.2
1940.25	0.00	0.97	27.1	1940.24	0.00	0.97	28.1	1940.24	0.00	0.98	29.0
1940.23	0.00	1.09	29.8	1940.22	0.00	1.20	30.6	1940.19	0.00	1.29	31.4
1940.08	0.00	1.30	32.2	1939.83	0.00	1.17	33.0	1939.69	0.00	1.06	33.9
1939.52	0.00	0.91	34.8	1939.32	0.00	0.74	35.8	1939.16	0.00	0.60	36.7
1939.15	0.00	0.62	37.6	1939.14	0.00	0.63	38.5	1939.13	0.00	0.65	39.4
1939.13	0.00	0.67	40.3	1939.12	0.00	0.69	41.3	1939.12	0.00	0.71	42.2
1939.12	0.00	0.73	43.1	1939.11	0.00	0.75	44.0	1939.11	0.00	0.78	44.9
1939.11	0.00	0.80	45.7	1939.10	0.00	0.83	46.6	1939.10	0.00	0.85	47.4
1939.10	0.00	0.88	48.3	1939.09	0.00	0.90	49.1	1939.09	0.00	0.93	50.0
1939.09	0.00	0.90	50.8	1939.10	0.00	0.87	51.7	1939.10	0.00	0.84	52.5
1939.10	0.00	0.81	53.3	1939.11	0.00	0.78	54.2	1939.11	0.00	0.75	55.0
1939.11	0.00	0.73	55.9	1939.12	0.00	0.71	56.8	1939.12	0.00	0.69	57.8
1939.12	0.00	0.67	58.7	1939.13	0.00	0.65	59.6	1939.13	0.00	0.64	60.5
1939.14	0.00	0.62	61.5	1939.15	0.00	0.61	62.4	1939.16	0.00	0.59	63.3
1939.34	0.00	0.75	64.2	1939.53	0.00	0.92	65.2	1939.70	0.00	1.06	66.1
1939.83	0.00	1.17	67.0	1940.12	0.00	1.30	67.8	1940.20	0.00	1.24	68.5
1940.23	0.00	1.11	69.2	1940.24	0.00	0.98	70.0	1940.24	0.00	0.97	70.9
1940.24	0.00	0.96	71.8	1940.25	0.00	0.96	72.7	1940.26	0.00	0.97	73.6
1940.27	0.00	0.96	74.5	1940.28	0.00	0.97	75.5	1940.29	0.00	0.96	76.4
1940.29	0.00	0.96	77.3	1940.30	0.00	0.96	78.2	1940.38	0.00	1.03	79.1
1940.63	0.00	0.00	80.0								

## ID

18 SECTION 172.00 TIME = 10.38 HRS WS =1939.36 WIDTH = 69.3

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1939.56	0.00	0.00	10.0	1939.11	0.01	1.60	10.8	1939.09	0.01	1.60	12.1
1939.07	0.01	1.58	12.8	1939.06	0.01	1.58	13.8	1939.05	0.01	1.58	14.7
1939.05	0.01	1.59	15.7	1939.05	0.01	1.60	16.6	1939.07	0.01	1.64	17.6
1939.04	0.01	1.61	18.6	1939.07	0.01	1.65	19.5	1939.03	0.01	1.62	20.5
1939.02	0.01	1.62	21.4	1939.01	0.01	1.62	22.4	1939.05	0.01	1.67	23.3
1939.00	0.01	1.63	24.3	1939.04	0.01	1.68	25.2	1938.99	0.01	1.64	26.2
1939.03	0.01	1.69	27.1	1939.02	0.01	1.69	28.1	1939.02	0.01	1.70	29.0
1939.01	0.01	1.78	29.8	1939.01	0.01	1.89	30.6	1939.00	0.01	1.98	31.4
1938.98	0.01	2.06	32.2	1938.96	0.01	2.14	33.0	1938.91	0.01	2.12	33.9
1938.86	0.01	2.10	34.8	1938.80	0.01	2.06	35.7	1938.72	0.01	2.01	36.6
1938.63	0.01	1.95	37.5	1938.52	0.01	1.87	38.5	1938.43	0.01	1.80	39.4
1938.40	0.01	1.80	40.3	1938.37	0.01	1.80	41.2	1938.34	0.01	1.79	42.1
1938.31	0.01	1.79	43.0	1938.28	0.01	1.78	43.9	1938.25	0.01	1.78	44.8
1938.21	0.01	1.77	45.6	1938.18	0.01	1.76	46.5	1938.15	0.01	1.76	47.4
1938.11	0.01	1.74	48.2	1938.08	0.01	1.73	49.1	1938.05	0.01	1.73	50.0
1938.08	0.01	1.72	50.8	1938.11	0.01	1.72	51.7	1938.15	0.01	1.73	52.5
1938.18	0.01	1.72	53.3	1938.21	0.01	1.72	54.2	1938.24	0.01	1.72	55.0
1938.27	0.01	1.73	55.9	1938.30	0.01	1.74	56.8	1938.34	0.01	1.75	57.8
1938.37	0.01	1.75	58.7	1938.40	0.01	1.76	59.6	1938.45	0.01	1.79	60.5
1938.56	0.01	1.88	61.5	1938.66	0.01	1.95	62.4	1938.74	0.01	2.01	63.3
1938.81	0.01	2.06	64.2	1938.87	0.01	2.09	65.2	1938.92	0.01	2.12	66.1
1938.90	0.01	2.08	67.0	1938.89	0.01	1.95	67.8	1938.92	0.01	1.85	68.5
1938.93	0.01	1.73	69.2	1938.93	0.01	1.61	70.0	1938.94	0.01	1.60	70.9
1938.95	0.01	1.59	71.8	1938.93	0.01	1.56	72.7	1938.96	0.01	1.57	73.6

1938.94	0.01	1.53	74.5	1938.97	0.01	1.54	75.5	1938.98	0.01	1.53	76.3
1938.96	0.01	1.50	77.1	1938.97	0.01	1.49	78.0	1939.05	0.01	1.54	79.1
1939.56	0.00	0.00	80.0								

ID  
17 SECTION 171.00 TIME = 10.38 HRS WS =1935.26 WIDTH = 45.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1936.46	0.00	0.00	10.0	1936.19	0.00	0.44	10.9	1936.13	0.00	0.39	11.9
1936.04	0.00	0.32	12.8	1936.03	0.00	0.32	13.8	1936.03	0.00	0.34	14.7
1936.03	0.00	0.35	15.7	1936.02	0.00	0.36	16.6	1936.02	0.00	0.37	17.6
1936.02	0.00	0.39	18.6	1936.02	0.00	0.40	19.5	1936.04	0.00	0.43	20.5
1936.01	0.00	0.42	21.4	1936.03	0.00	0.46	22.4	1936.01	0.00	0.45	23.3
1936.01	0.00	0.46	24.3	1936.00	0.00	0.47	25.2	1935.73	0.00	0.22	26.2
1935.23	0.00	-0.27	26.8	1935.04	-0.01	-0.45	27.4	1934.97	-0.01	-0.50	28.4
1934.85	-0.02	-0.52	29.2	1934.87	-0.01	-0.40	29.8	1934.82	-0.02	-0.35	31.4
1934.73	-0.02	-0.34	32.2	1934.74	-0.02	-0.23	33.0	1934.45	-0.02	-0.50	33.9
1934.31	-0.03	-0.60	34.8	1934.30	-0.03	-0.58	35.7	1934.30	-0.03	-0.55	36.6
1934.29	-0.03	-0.52	37.5	1934.29	-0.03	-0.50	38.4	1934.29	-0.03	-0.47	39.3
1934.28	-0.03	-0.45	40.2	1934.28	-0.03	-0.42	41.1	1934.27	-0.03	-0.40	42.0
1934.27	-0.03	-0.38	42.9	1934.26	-0.03	-0.36	43.8	1934.26	-0.03	-0.34	44.7
1934.25	-0.03	-0.33	45.6	1934.25	-0.03	-0.31	46.4	1934.25	-0.03	-0.29	47.3
1934.24	-0.03	-0.27	48.2	1934.24	-0.03	-0.26	49.1	1934.23	-0.03	-0.24	50.0
1934.24	-0.03	-0.27	50.8	1934.24	-0.03	-0.30	51.7	1934.24	-0.03	-0.33	52.5
1934.25	-0.03	-0.35	53.3	1934.25	-0.03	-0.38	54.2	1934.26	-0.03	-0.41	55.0
1934.26	-0.03	-0.43	55.9	1934.27	-0.03	-0.45	56.8	1934.27	-0.03	-0.47	57.8
1934.28	-0.03	-0.49	58.7	1934.28	-0.03	-0.51	59.6	1934.28	-0.03	-0.52	60.5
1934.29	-0.03	-0.54	61.5	1934.29	-0.03	-0.56	62.4	1934.30	-0.03	-0.58	63.3
1934.30	-0.03	-0.60	64.2	1934.31	-0.03	-0.61	65.2	1934.47	-0.02	-0.48	66.1
1934.64	-0.02	-0.33	67.0	1934.59	-0.02	-0.50	67.8	1934.71	-0.02	-0.51	69.3
1934.93	-0.01	-0.42	69.8	1935.00	-0.01	-0.47	70.7	1935.13	-0.01	-0.37	71.7
1935.25	0.00	-0.27	72.0	1935.81	0.00	0.27	72.8	1936.11	0.00	0.55	73.8
1936.13	0.00	0.53	74.7	1936.14	0.00	0.52	75.6	1936.12	0.00	0.48	76.6
1936.13	0.00	0.46	77.5	1936.14	0.00	0.45	78.4	1936.15	0.00	0.43	79.4
1936.15	0.00	0.40	80.3	1936.16	0.00	0.39	81.2	1936.19	0.00	0.39	82.2
1936.19	0.00	0.37	83.0	1936.21	0.00	0.36	83.9	1936.46	0.00	0.00	85.0

ID  
16 SECTION 170.00 TIME = 10.38 HRS WS =1934.29 WIDTH = 77.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1934.52	0.00	0.00	10.0	1934.23	-0.04	0.22	10.9	1934.22	0.01	0.23	11.9
1934.20	0.01	0.23	12.9	1934.16	0.01	0.21	13.8	1934.16	0.01	0.23	14.8
1934.15	0.01	0.24	15.7	1934.16	0.01	0.27	16.6	1934.16	0.01	0.29	17.6
1934.16	0.01	0.31	18.6	1934.14	0.01	0.32	19.4	1934.07	0.01	0.26	20.2
1934.01	0.01	0.22	20.9	1934.00	0.01	0.23	21.7	1933.99	0.01	0.24	22.9
1933.95	0.02	0.22	23.9	1933.94	0.02	0.23	25.2	1933.97	0.01	0.28	26.2
1933.96	0.02	0.29	27.1	1933.91	0.02	0.27	28.0	1933.89	0.02	0.26	29.0
1933.94	0.02	0.41	29.8	1933.92	0.02	0.49	30.6	1933.88	0.02	0.55	31.4
1933.87	0.02	0.64	32.2	1933.70	0.02	0.57	33.0	1933.54	0.02	0.45	33.9
1933.44	0.03	0.37	34.8	1933.42	0.03	0.39	35.7	1933.40	0.03	0.40	36.6
1933.38	0.03	0.41	37.4	1933.36	0.03	0.43	38.3	1933.33	0.03	0.44	39.2
1933.32	0.03	0.45	40.1	1933.29	0.03	0.46	41.0	1933.27	0.03	0.46	41.9
1933.25	0.03	0.46	42.8	1933.22	0.03	0.45	43.7	1933.20	0.03	0.45	44.6
1933.18	0.03	0.45	45.5	1933.16	0.03	0.45	46.4	1933.13	0.03	0.44	47.3
1933.11	0.03	0.44	48.2	1933.09	0.03	0.44	49.1	1933.07	0.03	0.44	50.0
1933.09	0.03	0.43	50.9	1933.11	0.03	0.42	51.7	1933.13	0.03	0.42	52.6
1933.15	0.03	0.41	53.4	1933.17	0.03	0.40	54.3	1933.20	0.03	0.40	55.1
1933.22	0.03	0.39	56.0	1933.24	0.03	0.39	56.9	1933.26	0.03	0.38	57.8
1933.29	0.03	0.38	58.8	1933.31	0.03	0.38	59.7	1933.33	0.03	0.38	60.6

1933.35	0.03	0.37	61.5	1933.37	0.03	0.37	62.4	1933.39	0.03	0.36	63.2
1933.41	0.03	0.36	64.3	1933.43	0.03	0.35	65.2	1933.57	0.02	0.46	66.1
1933.70	0.02	0.57	67.0	1933.89	0.02	0.56	67.8	1933.88	0.02	0.35	68.5
1933.88	0.02	0.15	69.6	1933.90	0.02	-0.03	70.4	1933.95	0.02	0.02	71.1
1933.90	0.02	-0.02	72.4	1934.04	0.01	0.12	73.1	1934.10	0.01	0.19	74.0
1934.19	0.01	0.29	74.8	1934.19	0.01	0.29	75.7	1934.19	0.01	0.29	76.7
1934.19	0.01	0.30	77.6	1934.19	0.01	0.30	78.6	1934.19	0.01	0.31	79.5
1934.19	0.01	0.31	80.5	1934.19	0.01	0.32	81.4	1934.19	0.01	0.32	82.4
1934.18	0.01	0.32	83.3	1934.20	0.01	0.35	84.3	1934.22	0.01	0.37	85.2
1934.24	0.01	0.39	86.2	1934.23	-0.04	0.39	87.0	1934.24	-0.04	0.40	88.0
1934.30	0.00	0.46	88.9	1934.52	0.00	0.00	90.0				

ID  
15 SECTION 169.00 TIME = 10.38 HRS WS = 1932.06 WIDTH = 62.

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1932.73	0.00	0.00	10.0	1932.31	0.00	0.05	10.9	1931.89	0.01	-0.35	11.5
1931.77	-0.01	-0.45	12.8	1931.78	-0.01	-0.41	13.7	1931.78	-0.01	-0.39	14.8
1931.78	-0.01	-0.36	15.7	1931.78	-0.01	-0.34	16.5	1931.77	-0.01	-0.32	17.3
1931.76	-0.01	-0.30	18.6	1931.76	-0.01	-0.28	19.3	1931.74	-0.01	-0.28	20.1
1931.73	-0.01	-0.26	21.3	1931.74	-0.01	-0.23	22.4	1931.73	-0.01	-0.21	23.1
1931.73	-0.01	-0.19	23.9	1931.71	-0.01	-0.18	24.9	1931.69	-0.01	-0.17	26.1
1931.70	-0.01	-0.14	27.1	1931.69	-0.01	-0.12	28.1	1931.69	-0.01	-0.10	29.0
1931.73	-0.01	0.04	29.8	1931.73	-0.01	0.14	30.6	1931.69	-0.01	0.20	31.4
1931.68	-0.01	0.30	32.2	1931.50	-0.02	0.21	33.0	1931.43	-0.02	0.17	33.9
1931.40	-0.02	0.17	34.8	1931.36	-0.02	0.17	35.7	1931.33	-0.02	0.17	36.6
1931.30	-0.02	0.17	37.4	1931.26	-0.02	0.17	38.3	1931.23	-0.02	0.17	39.2
1931.19	-0.02	0.17	40.1	1931.15	-0.03	0.16	41.0	1931.11	-0.03	0.14	41.9
1931.07	-0.03	0.12	42.8	1931.03	-0.03	0.10	43.7	1930.99	-0.03	0.08	44.6
1930.96	-0.03	0.07	45.5	1930.96	-0.03	0.09	46.4	1930.96	-0.03	0.11	47.3
1930.96	-0.03	0.13	48.2	1930.96	-0.03	0.15	49.1	1930.96	-0.03	0.17	50.0
1930.96	-0.03	0.14	50.9	1930.96	-0.03	0.11	51.7	1930.96	-0.03	0.08	52.6
1930.96	-0.03	0.06	53.4	1930.96	-0.03	0.03	54.3	1930.98	-0.03	0.02	55.1
1931.02	-0.03	0.03	56.0	1931.06	-0.03	0.05	56.9	1931.10	-0.03	0.06	57.8
1931.14	-0.03	0.08	58.8	1931.18	-0.02	0.09	59.7	1931.22	-0.02	0.10	60.6
1931.26	-0.02	0.12	61.5	1931.29	-0.02	0.13	62.4	1931.33	-0.02	0.14	63.3
1931.36	-0.02	0.15	64.3	1931.39	-0.02	0.16	65.2	1931.43	-0.02	0.16	66.1
1931.50	-0.02	0.21	67.0	1931.87	-0.01	0.38	67.8	1931.86	-0.01	0.17	68.5
1931.87	-0.01	-0.02	69.5	1931.87	-0.01	-0.22	70.3	1931.86	-0.01	-0.24	71.1
1931.86	-0.01	-0.26	72.0	1931.86	-0.01	-0.26	73.3	1931.97	0.01	-0.15	74.0
1932.37	0.00	0.23	74.8	1932.37	0.00	0.23	75.7	1932.38	0.00	0.23	76.7
1932.39	0.00	0.22	77.6	1932.38	0.00	0.20	78.6	1932.38	0.00	0.20	79.5
1932.39	0.00	0.19	80.5	1932.39	0.00	0.19	81.5	1932.40	0.00	0.19	82.4
1932.40	0.00	0.18	83.3	1932.41	0.00	0.17	84.3	1932.42	0.00	0.18	85.3
1932.45	0.00	0.19	86.2	1932.46	0.00	0.20	87.1	1932.46	0.00	0.19	88.1
1932.49	0.00	0.21	89.0	1932.73	0.00	0.00	90.0				

ID  
14 SECTION 168.00 TIME = 10.38 HRS WS = 1930.86 WIDTH = 77.

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1931.08	0.00	0.00	10.0	1930.86	0.02	0.44	10.9	1930.64	0.00	0.24	11.9
1930.65	0.00	0.28	12.8	1930.64	0.00	0.29	13.8	1930.65	0.00	0.33	14.7
1930.65	0.00	0.35	15.7	1930.65	0.00	0.37	16.6	1930.65	0.00	0.40	17.3
1930.65	0.00	0.43	18.2	1930.64	0.00	0.44	19.1	1930.63	0.00	0.46	20.4
1930.65	0.00	0.50	21.4	1930.64	0.00	0.51	22.4	1930.64	0.00	0.54	23.1
1930.62	0.00	0.55	24.3	1930.61	0.00	0.56	25.2	1930.60	0.01	0.58	26.2
1930.62	0.00	0.62	27.1	1930.61	0.00	0.63	28.1	1930.59	0.01	0.64	29.0
1930.58	0.01	0.73	29.8	1930.58	0.01	0.83	30.6	1930.58	0.01	0.93	31.4
1930.51	0.01	0.95	32.2	1930.33	0.01	0.88	33.0	1930.23	0.01	0.81	33.9

1930.12	0.01	0.75	34.8	1930.09	0.01	0.75	35.6	1930.05	0.01	0.75	36.5
1930.02	0.01	0.76	37.4	1929.99	0.01	0.77	38.2	1929.96	0.01	0.77	39.1
1929.93	0.01	0.78	40.0	1929.90	0.01	0.77	40.9	1929.87	0.01	0.75	41.8
1929.83	0.01	0.73	42.7	1929.79	0.01	0.72	43.6	1929.76	0.01	0.70	44.5
1929.72	0.01	0.68	45.5	1929.68	0.01	0.66	46.4	1929.64	0.01	0.63	47.3
1929.60	0.01	0.62	48.2	1929.56	0.01	0.59	49.1	1929.53	0.01	0.58	50.0
1929.56	0.01	0.58	50.9	1929.60	0.01	0.59	51.7	1929.63	0.01	0.60	52.6
1929.67	0.01	0.61	53.4	1929.71	0.01	0.61	54.3	1929.75	0.01	0.62	55.1
1929.78	0.01	0.63	56.0	1929.82	0.01	0.64	56.9	1929.85	0.01	0.65	57.8
1929.89	0.01	0.66	58.8	1929.92	0.01	0.67	59.7	1929.95	0.01	0.68	60.6
1929.98	0.01	0.68	61.5	1930.02	0.01	0.69	62.4	1930.04	0.01	0.69	63.3
1930.08	0.01	0.71	64.3	1930.15	0.01	0.75	65.2	1930.25	0.01	0.82	66.1
1930.33	0.01	0.88	67.0	1930.57	0.01	0.92	67.8	1930.57	0.01	0.72	68.5
1930.59	0.01	0.54	69.6	1930.58	0.01	0.33	70.5	1930.66	0.00	0.40	71.2
1930.77	0.00	0.50	72.0	1930.74	0.00	0.46	72.9	1930.74	0.00	0.45	73.9
1930.75	0.00	0.46	74.8	1930.75	0.00	0.44	75.8	1930.76	0.00	0.44	76.7
1930.77	0.00	0.44	77.6	1930.73	0.00	0.40	78.6	1930.74	0.00	0.40	79.5
1930.74	0.00	0.39	80.5	1930.73	0.00	0.36	81.4	1930.73	0.00	0.35	82.4
1930.73	0.00	0.35	83.3	1930.73	0.00	0.34	84.3	1930.74	0.00	0.33	85.2
1930.78	0.00	0.37	86.1	1930.83	0.00	0.41	87.1	1930.86	0.02	0.43	88.0
1930.87	0.00	0.43	88.9	1931.08	0.00	0.00	90.0				

ID  
13 SECTION 167.00 TIME = 10.38 HRS WS =1928.46 WIDTH = 73.0

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1928.83	0.00	0.00	10.0	1928.59	0.00	0.00	10.9	1928.58	0.00	0.01	11.9
1928.22	-0.02	-0.32	12.5	1928.20	-0.02	-0.31	13.5	1928.19	-0.02	-0.29	14.8
1928.21	-0.02	-0.25	15.7	1928.21	-0.02	-0.22	16.7	1928.19	-0.02	-0.22	17.6
1928.21	-0.02	-0.17	18.5	1928.21	-0.02	-0.15	19.4	1928.22	-0.02	-0.12	20.3
1928.20	-0.02	-0.11	21.4	1928.20	-0.02	-0.09	22.4	1928.20	-0.02	-0.06	23.3
1928.19	-0.02	-0.04	24.3	1928.19	-0.02	-0.02	25.2	1928.22	-0.02	0.03	26.2
1928.21	-0.02	0.05	27.1	1928.21	-0.02	0.08	28.1	1928.21	-0.02	0.10	29.0
1928.21	-0.02	0.20	29.8	1928.21	-0.02	0.30	30.6	1928.20	-0.02	0.39	31.4
1928.21	0.01	0.50	32.2	1927.97	0.02	0.36	33.0	1927.86	0.02	0.29	33.9
1927.82	0.02	0.29	34.7	1927.77	0.02	0.29	35.6	1927.71	0.02	0.28	36.4
1927.67	0.02	0.27	37.3	1927.62	0.02	0.27	38.1	1927.58	0.02	0.27	39.0
1927.53	0.02	0.23	39.9	1927.47	0.02	0.20	40.8	1927.42	0.02	0.16	41.8
1927.37	0.02	0.12	42.7	1927.32	0.03	0.09	43.6	1927.26	0.03	0.05	44.5
1927.21	0.03	0.02	45.4	1927.18	0.03	0.00	46.3	1927.17	0.03	0.01	47.3
1927.16	0.03	0.02	48.2	1927.16	0.03	0.03	49.1	1927.15	0.03	0.04	50.0
1927.16	0.03	0.03	50.9	1927.16	0.03	0.01	51.8	1927.17	0.03	-0.01	52.7
1927.17	0.03	-0.02	53.6	1927.20	0.03	-0.02	54.4	1927.25	0.03	0.01	55.3
1927.30	0.03	0.04	56.2	1927.35	0.02	0.07	57.1	1927.41	0.02	0.10	58.0
1927.46	0.02	0.12	58.9	1927.51	0.02	0.14	59.8	1927.56	0.02	0.16	60.7
1927.61	0.02	0.18	61.6	1927.66	0.02	0.20	62.5	1927.71	0.02	0.22	63.4
1927.76	0.02	0.24	64.3	1927.81	0.02	0.26	65.2	1927.86	0.02	0.28	66.1
1927.97	0.02	0.36	67.0	1928.19	-0.02	0.38	67.8	1928.19	-0.02	0.18	68.5
1928.20	-0.02	-0.01	69.4	1928.20	-0.02	-0.21	70.0	1928.21	-0.02	-0.21	71.0
1928.21	-0.02	-0.22	71.9	1928.21	-0.02	-0.23	72.9	1928.21	-0.02	-0.23	73.8
1928.19	-0.02	-0.27	74.8	1928.19	-0.02	-0.28	75.7	1928.19	-0.02	-0.28	76.7
1928.20	-0.02	-0.29	77.6	1928.20	-0.02	-0.30	78.6	1928.20	-0.02	-0.30	79.9
1928.20	-0.02	-0.31	80.5	1928.21	-0.02	-0.32	81.5	1928.21	-0.02	-0.32	82.4
1928.21	-0.02	-0.34	83.3	1928.21	-0.02	-0.34	84.7	1928.56	0.00	0.00	85.3
1928.58	0.00	0.01	86.2	1928.58	0.00	0.00	87.1	1928.59	0.00	0.00	88.1
1928.60	0.00	0.00	89.0	1928.83	0.00	0.00	90.0				

ID  
12 SECTION 166.00 TIME = 10.38 HRS WS =1925.39 WIDTH = 38.4

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1927.53	0.00	0.00	10.0	1927.22	0.00	0.01	10.9	1927.20	0.00	0.04	11.9
1927.15	0.00	0.04	12.9	1927.12	0.00	0.06	13.8	1927.11	0.00	0.10	14.7
1927.12	0.00	0.16	15.7	1927.13	0.00	0.22	16.7	1927.11	0.00	0.25	17.6
1927.09	0.00	0.28	18.6	1927.08	0.00	0.32	19.5	1927.07	0.00	0.36	20.5
1927.04	0.00	0.38	21.3	1927.04	0.00	0.43	22.3	1927.04	0.00	0.48	23.3
1927.04	0.00	0.53	24.3	1927.04	0.00	0.58	25.2	1927.01	0.00	0.60	26.2
1926.98	0.00	0.62	27.1	1926.95	0.00	0.64	28.1	1926.62	-0.01	0.36	29.0
1926.03	-0.01	-0.13	29.8	1925.41	0.00	-0.65	30.6	1925.27	0.00	-0.69	30.8
1924.90	0.00	-0.96	31.5	1924.66	0.00	-1.10	33.0	1924.61	0.00	-1.10	33.9
1924.68	0.00	-0.99	34.7	1924.67	0.00	-0.96	35.6	1924.31	0.00	-1.28	36.4
1924.26	0.00	-1.28	37.3	1924.26	0.00	-1.24	38.1	1924.26	0.00	-1.20	39.0
1924.25	0.00	-1.19	39.9	1924.25	0.00	-1.18	40.8	1924.25	0.00	-1.16	41.8
1924.24	0.00	-1.15	42.7	1924.24	0.00	-1.14	43.6	1924.24	0.00	-1.12	44.5
1924.24	0.01	-1.10	45.4	1924.24	0.01	-1.09	46.3	1924.24	0.01	-1.07	47.3
1924.24	0.02	-1.05	48.2	1924.24	0.02	-1.04	49.1	1924.24	0.02	-1.02	50.0
1924.24	0.02	-1.04	50.9	1924.24	0.02	-1.06	51.8	1924.24	0.01	-1.08	52.7
1924.24	0.01	-1.10	53.6	1924.24	0.01	-1.12	54.5	1924.24	0.00	-1.14	55.4
1924.24	0.00	-1.16	56.3	1924.24	0.00	-1.18	57.2	1924.25	0.00	-1.19	58.1
1924.25	0.00	-1.21	59.0	1924.25	0.00	-1.24	59.9	1924.26	0.00	-1.27	60.8
1924.26	0.00	-1.30	61.7	1924.26	0.00	-1.33	62.6	1924.58	0.00	-1.05	63.4
1925.07	0.00	-0.59	64.3	1925.06	0.00	-0.64	65.2	1925.04	0.00	-0.69	66.1
1925.07	0.00	-0.69	67.1	1925.12	0.01	-0.77	68.8	1925.40	0.01	-0.61	69.0
1925.59	-0.01	-0.55	69.2	1926.15	-0.01	-0.11	70.0	1926.84	-0.01	0.55	71.0
1926.95	0.00	0.64	71.9	1926.97	0.00	0.64	72.9	1926.99	0.00	0.63	73.8
1927.00	0.00	0.62	74.8	1927.02	0.00	0.62	75.7	1927.03	0.00	0.61	76.7
1927.05	0.00	0.60	77.6	1927.03	0.00	0.56	78.6	1927.05	0.00	0.55	79.5
1927.04	0.00	0.52	80.5	1927.05	0.00	0.50	81.4	1927.08	0.00	0.51	82.4
1927.08	0.00	0.49	83.3	1927.10	0.00	0.49	84.3	1927.11	0.00	0.47	85.3
1927.14	0.00	0.47	86.2	1927.15	0.00	0.46	87.1	1927.17	0.00	0.46	88.0
1927.26	0.00	0.52	88.9	1927.53	0.00	0.00	90.0				

ID  
 11 SECTION 165.00 TIME = 10.38 HRS WS =1924.34 WIDTH = 48.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1925.42	0.00	0.00	10.0	1925.40	0.00	0.00	10.9	1925.37	0.00	0.00	11.9
1925.34	0.00	0.00	12.8	1925.32	0.00	0.00	13.8	1925.29	0.00	0.00	14.7
1925.27	0.00	0.00	15.7	1925.24	0.00	0.00	16.6	1925.22	0.00	0.00	17.6
1925.19	0.00	0.00	18.6	1925.17	0.00	0.00	19.5	1925.14	0.00	0.00	20.5
1925.12	0.00	0.00	21.4	1925.09	0.00	0.00	22.4	1925.07	0.00	0.00	23.3
1925.04	0.00	0.00	24.3	1925.02	0.00	0.00	25.2	1924.99	0.00	0.00	26.2
1924.66	0.00	-0.30	27.1	1924.34	0.02	-0.60	27.9	1924.09	-0.01	-0.83	28.5
1923.95	-0.01	-0.77	29.2	1923.96	-0.01	-0.56	29.4	1923.94	-0.01	-0.38	31.4
1923.99	-0.01	-0.13	32.2	1923.47	-0.02	-0.45	33.0	1923.43	-0.02	-0.44	33.8
1923.43	-0.02	-0.39	34.7	1923.42	-0.03	-0.35	35.5	1923.42	-0.03	-0.30	36.3
1923.42	-0.03	-0.26	37.2	1923.41	-0.03	-0.21	38.0	1923.41	-0.03	-0.20	38.9
1923.40	-0.03	-0.18	39.8	1923.40	-0.03	-0.17	40.8	1923.40	-0.03	-0.16	41.7
1923.39	-0.03	-0.15	42.6	1923.39	-0.03	-0.14	43.5	1923.39	-0.03	-0.13	44.5
1923.38	-0.03	-0.11	45.4	1923.38	-0.04	-0.10	46.3	1923.37	-0.04	-0.09	47.2
1923.37	-0.04	-0.08	48.2	1923.37	-0.04	-0.07	49.1	1923.36	-0.04	-0.06	50.0
1923.37	-0.04	-0.07	50.9	1923.37	-0.04	-0.09	51.8	1923.37	-0.04	-0.11	52.7
1923.38	-0.04	-0.12	53.6	1923.38	-0.03	-0.14	54.5	1923.39	-0.03	-0.16	55.4
1923.39	-0.03	-0.17	56.3	1923.39	-0.03	-0.19	57.2	1923.40	-0.03	-0.20	58.1
1923.40	-0.03	-0.22	59.0	1923.40	-0.03	-0.25	59.9	1923.41	-0.03	-0.28	60.8
1923.41	-0.03	-0.31	61.7	1923.41	-0.03	-0.34	62.6	1923.42	-0.03	-0.37	63.4
1923.42	-0.03	-0.40	64.3	1923.43	-0.02	-0.43	65.2	1923.43	-0.02	-0.46	66.1
1923.50	-0.02	-0.42	67.0	1923.97	-0.01	-0.07	67.8	1924.01	-0.01	-0.16	68.5
1923.96	-0.01	-0.33	69.2	1924.02	-0.01	-0.40	70.0	1924.01	-0.01	-0.44	71.4
1924.00	-0.01	-0.47	72.5	1924.01	-0.01	-0.48	73.5	1923.97	-0.01	-0.54	74.4
1924.02	-0.01	-0.52	75.1	1924.22	0.01	-0.35	75.9	1924.46	0.00	-0.12	76.7

1924.52	0.00	-0.09	77.7	1924.59	0.00	-0.04	78.6	1924.66	0.00	0.00	79.5
1924.68	0.00	0.00	80.5	1924.71	0.00	0.00	81.4	1924.73	0.00	0.00	82.4
1924.75	0.00	0.00	83.3	1924.78	0.00	0.00	84.3	1924.80	0.00	0.00	85.2
1924.82	0.00	0.00	86.2	1924.85	0.00	0.00	87.1	1924.87	0.00	0.00	88.1
1924.90	0.00	0.00	89.0	1924.95	0.00	0.00	90.0				

ID  
10 SECTION 164.00 TIME = 10.38 HRS WS =1921.97 WIDTH = 41.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1924.08	0.00	0.00	10.0	1924.06	0.00	0.00	10.9	1924.05	0.00	0.00	11.9
1924.03	0.00	0.00	12.8	1924.02	0.00	0.00	13.8	1924.00	0.00	0.00	14.7
1923.99	0.00	0.00	15.7	1923.97	0.00	0.00	16.6	1923.96	0.00	0.00	17.6
1923.94	0.00	0.00	18.6	1923.93	0.00	0.00	19.5	1923.91	0.00	0.00	20.5
1923.90	0.00	0.00	21.4	1923.88	0.00	0.00	22.4	1923.87	0.00	0.00	23.3
1923.85	0.00	0.00	24.3	1923.84	0.00	0.00	25.2	1923.82	0.00	0.00	26.2
1923.54	0.00	-0.27	27.1	1922.85	0.00	-0.94	28.1	1922.16	0.00	-1.62	29.0
1921.94	-0.06	-1.50	29.2	1921.80	-0.03	-1.30	29.4	1921.15	0.03	-1.61	30.4
1921.12	0.03	-1.30	32.2	1921.12	0.03	-0.96	33.0	1921.12	0.03	-0.91	33.8
1921.12	0.03	-0.86	34.7	1921.11	0.03	-0.81	35.5	1921.11	0.03	-0.77	36.3
1921.11	0.03	-0.72	37.2	1921.11	0.03	-0.67	38.0	1921.11	0.03	-0.65	38.9
1921.11	0.03	-0.64	39.8	1921.11	0.03	-0.63	40.8	1921.11	0.03	-0.61	41.7
1921.11	0.03	-0.60	42.6	1921.10	0.03	-0.58	43.5	1921.10	0.03	-0.57	44.5
1921.10	0.03	-0.55	45.4	1921.10	0.03	-0.54	46.3	1921.10	0.03	-0.53	47.2
1921.10	0.03	-0.51	48.2	1921.10	0.03	-0.50	49.1	1921.10	0.03	-0.48	50.0
1921.10	0.03	-0.50	50.9	1921.10	0.03	-0.52	51.8	1921.10	0.03	-0.53	52.7
1921.10	0.03	-0.55	53.6	1921.10	0.03	-0.57	54.5	1921.10	0.03	-0.59	55.5
1921.10	0.03	-0.60	56.4	1921.11	0.03	-0.62	57.3	1921.11	0.03	-0.64	58.2
1921.11	0.03	-0.65	59.1	1921.11	0.03	-0.67	60.0	1921.11	0.03	-0.71	60.9
1921.11	0.03	-0.74	61.8	1921.11	0.03	-0.78	62.6	1921.11	0.03	-0.82	63.5
1921.11	0.03	-0.85	64.4	1921.12	0.03	-0.89	65.2	1921.12	0.03	-0.93	66.1
1921.12	0.03	-0.96	67.0	1921.12	0.03	-1.34	67.7	1921.27	0.02	-1.56	69.6
1921.75	-0.02	-1.45	70.4	1921.98	-0.02	-1.60	70.7	1922.22	-0.01	-1.38	71.0
1922.92	0.00	-0.71	71.9	1923.61	0.00	-0.04	72.9	1923.68	0.00	0.00	73.8
1923.70	0.00	0.00	74.8	1923.72	0.00	0.00	75.7	1923.75	0.00	0.00	76.7
1923.77	0.00	0.00	77.6	1923.79	0.00	0.00	78.6	1923.82	0.00	0.00	79.5
1923.84	0.00	0.00	80.5	1923.87	0.00	0.00	81.4	1923.89	0.00	0.00	82.4
1923.91	0.00	0.00	83.3	1923.94	0.00	0.00	84.3	1923.96	0.00	0.00	85.2
1923.98	0.00	0.00	86.2	1924.01	0.00	0.00	87.1	1924.03	0.00	0.00	88.1
1924.06	0.00	0.00	89.0	1924.08	0.00	0.00	90.0				

ID  
9 SECTION 163.00 TIME = 10.38 HRS WS =1920.85 WIDTH = 43.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1922.74	0.00	0.00	10.0	1922.69	0.00	0.00	10.9	1922.64	0.00	0.00	11.9
1922.59	0.00	0.00	12.8	1922.54	0.00	0.00	13.8	1922.49	0.00	0.00	14.7
1922.44	0.00	0.00	15.7	1922.39	0.00	0.00	16.6	1922.34	0.00	0.00	17.6
1922.29	0.00	0.00	18.6	1922.24	0.00	0.00	19.5	1922.19	0.00	0.00	20.5
1922.14	0.00	0.00	21.4	1922.09	0.00	0.00	22.4	1922.04	0.00	0.00	23.3
1921.99	0.00	0.00	24.3	1921.94	0.00	0.00	25.2	1921.73	-0.01	-0.16	26.2
1921.04	0.00	-0.80	27.1	1920.77	0.00	-1.01	27.5	1920.45	-0.01	-1.29	28.2
1920.19	-0.01	-1.25	28.9	1919.98	-0.01	-1.16	29.9	1919.98	-0.02	-0.86	31.2
1919.98	-0.02	-0.56	32.2	1919.98	-0.02	-0.26	33.0	1919.98	-0.02	-0.21	33.8
1919.98	-0.02	-0.16	34.7	1919.98	-0.02	-0.11	35.5	1919.98	-0.02	-0.06	36.3
1919.98	-0.02	-0.01	37.2	1919.97	-0.02	0.03	38.0	1919.97	-0.02	0.05	38.9
1919.97	-0.02	0.06	39.8	1919.97	-0.02	0.08	40.8	1919.97	-0.02	0.09	41.7
1919.97	-0.02	0.11	42.6	1919.97	-0.02	0.12	43.5	1919.97	-0.02	0.14	44.5
1919.97	-0.02	0.15	45.4	1919.97	-0.02	0.17	46.3	1919.97	-0.03	0.18	47.2
1919.97	-0.03	0.20	48.2	1919.97	-0.03	0.21	49.1	1919.97	-0.03	0.23	50.0

1919.97	-0.03	0.21	50.9	1919.97	-0.03	0.19	51.8	1919.97	-0.03	0.17	52.7
1919.97	-0.02	0.16	53.6	1919.97	-0.02	0.14	54.5	1919.97	-0.02	0.12	55.5
1919.97	-0.02	0.10	56.4	1919.97	-0.02	0.09	57.3	1919.97	-0.02	0.07	58.2
1919.97	-0.02	0.05	59.1	1919.97	-0.02	0.03	60.0	1919.97	-0.02	0.00	60.9
1919.97	-0.02	-0.04	61.8	1919.97	-0.02	-0.08	62.6	1919.98	-0.02	-0.11	63.5
1919.98	-0.02	-0.15	64.4	1919.98	-0.02	-0.19	65.2	1919.98	-0.02	-0.22	66.1
1919.98	-0.02	-0.26	67.0	1919.98	-0.02	-0.76	68.4	1920.39	-0.01	-0.85	69.2
1920.65	0.00	-1.10	69.9	1920.84	0.00	-1.40	70.4	1921.24	0.00	-1.02	71.0
1921.93	0.00	-0.36	71.9	1922.31	0.00	0.00	72.9	1922.34	0.00	0.00	73.8
1922.36	0.00	0.00	74.8	1922.38	0.00	0.00	75.7	1922.41	0.00	0.00	76.7
1922.43	0.00	0.00	77.6	1922.45	0.00	0.00	78.6	1922.48	0.00	0.00	79.5
1922.50	0.00	0.00	80.5	1922.53	0.00	0.00	81.4	1922.55	0.00	0.00	82.4
1922.57	0.00	0.00	83.3	1922.60	0.00	0.00	84.3	1922.62	0.00	0.00	85.2
1922.64	0.00	0.00	86.2	1922.67	0.00	0.00	87.1	1922.69	0.00	0.00	88.1
1922.72	0.00	0.00	89.0	1922.74	0.00	0.00	90.0				

ID  
8 SECTION 162.00 TIME = 10.38 HRS WS =1918.95 WIDTH = 41.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1920.39	0.00	0.00	10.0	1920.38	0.00	0.00	10.9	1920.37	0.00	0.00	11.9
1920.36	0.00	0.00	12.8	1920.35	0.00	0.00	13.8	1920.34	0.00	0.00	14.7
1920.33	0.00	0.00	15.7	1920.32	0.00	0.00	16.6	1920.31	0.00	0.00	17.6
1920.30	0.00	0.00	18.6	1920.29	0.00	0.00	19.5	1920.28	0.00	0.00	20.5
1920.27	0.00	0.00	21.4	1920.26	0.00	0.00	22.4	1920.25	0.00	0.00	23.3
1920.24	0.00	0.00	24.3	1920.23	0.00	0.00	25.2	1920.22	0.00	0.00	26.2
1919.86	0.00	-0.35	27.1	1919.17	0.00	-1.03	28.1	1919.01	0.00	-1.18	28.3
1918.62	0.04	-1.21	29.0	1918.13	0.01	-1.34	30.0	1918.13	0.01	-0.98	30.5
1918.12	0.01	-0.63	32.1	1918.12	0.01	-0.27	33.0	1918.12	0.01	-0.21	33.8
1918.12	0.01	-0.15	34.6	1918.12	0.01	-0.09	35.4	1918.12	0.01	-0.03	36.2
1918.12	0.01	0.03	37.0	1918.11	0.01	0.04	37.9	1918.11	0.01	0.05	38.9
1918.11	0.01	0.06	39.8	1918.11	0.01	0.08	40.7	1918.11	0.01	0.09	41.6
1918.10	0.01	0.10	42.6	1918.10	0.01	0.11	43.5	1918.10	0.01	0.13	44.4
1918.10	0.01	0.14	45.4	1918.10	0.01	0.15	46.3	1918.10	0.01	0.16	47.2
1918.09	0.01	0.18	48.1	1918.09	0.01	0.19	49.1	1918.09	0.01	0.20	50.0
1918.09	0.01	0.18	50.9	1918.09	0.01	0.17	51.8	1918.10	0.01	0.15	52.7
1918.10	0.01	0.13	53.6	1918.10	0.01	0.12	54.5	1918.10	0.01	0.10	55.5
1918.10	0.01	0.09	56.4	1918.10	0.01	0.07	57.3	1918.11	0.01	0.05	58.2
1918.11	0.01	0.04	59.1	1918.11	0.01	0.02	60.0	1918.11	0.01	-0.02	60.9
1918.11	0.01	-0.05	61.8	1918.11	0.01	-0.09	62.6	1918.12	0.01	-0.12	63.5
1918.12	0.01	-0.16	64.4	1918.12	0.01	-0.20	65.2	1918.12	0.01	-0.23	66.1
1918.12	0.01	-0.27	67.4	1918.23	0.01	-0.79	68.6	1918.81	0.04	-0.83	69.4
1918.99	0.00	-1.27	69.8	1919.14	0.00	-1.75	70.0	1919.83	0.00	-1.08	71.0
1920.52	0.00	-0.41	71.9	1920.96	0.00	0.00	72.9	1920.99	0.00	0.00	73.8
1921.01	0.00	0.00	74.8	1921.03	0.00	0.00	75.7	1921.06	0.00	0.00	76.7
1921.08	0.00	0.00	77.6	1921.10	0.00	0.00	78.6	1921.13	0.00	0.00	79.5
1921.15	0.00	0.00	80.5	1921.18	0.00	0.00	81.4	1921.20	0.00	0.00	82.4
1921.22	0.00	0.00	83.3	1921.25	0.00	0.00	84.3	1921.27	0.00	0.00	85.2
1921.29	0.00	0.00	86.2	1921.32	0.00	0.00	87.1	1921.34	0.00	0.00	88.1
1921.37	0.00	0.00	89.0	1921.39	0.00	0.00	90.0				

ID  
7 SECTION 161.00 TIME = 10.38 HRS WS =1917.65 WIDTH = 44.3

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1918.05	0.00	0.00	10.0	1918.08	0.00	0.00	10.9	1918.10	0.00	0.00	11.9
1918.13	0.00	0.00	12.8	1918.15	0.00	0.00	13.8	1918.18	0.00	0.00	14.7
1918.20	0.00	0.00	15.7	1918.23	0.00	0.00	16.6	1918.25	0.00	0.00	17.6
1918.28	0.00	0.00	18.6	1918.30	0.00	0.00	19.5	1918.33	0.00	0.00	20.5
1918.35	0.00	0.00	21.4	1918.38	0.00	0.00	22.4	1918.40	0.00	0.00	23.3

1918.43	0.00	0.00	24.3	1918.44	-0.01	-0.01	25.2	1917.70	-0.04	-0.78	26.2
1917.44	-0.01	-1.06	26.5	1917.37	0.00	-1.15	27.5	1917.38	0.00	-1.18	28.3
1917.27	0.00	-0.88	29.3	1916.76	0.01	-0.99	30.1	1916.76	0.01	-0.59	31.0
1916.76	0.01	-0.19	32.2	1916.76	0.01	0.21	33.0	1916.76	0.01	0.27	33.8
1916.76	0.01	0.33	34.6	1916.76	0.01	0.39	35.4	1916.76	0.01	0.45	36.2
1916.76	0.01	0.51	37.0	1916.76	0.01	0.52	37.9	1916.76	0.01	0.54	38.9
1916.76	0.01	0.55	39.8	1916.76	0.01	0.57	40.7	1916.76	0.01	0.58	41.6
1916.76	0.01	0.60	42.6	1916.76	0.01	0.61	43.5	1916.76	0.01	0.62	44.4
1916.76	0.01	0.64	45.4	1916.76	0.01	0.65	46.3	1916.76	0.01	0.67	47.2
1916.76	0.01	0.68	48.1	1916.76	0.01	0.69	49.1	1916.76	0.01	0.71	50.0
1916.76	0.01	0.69	50.9	1916.76	0.01	0.68	51.8	1916.76	0.01	0.66	52.8
1916.76	0.01	0.64	53.7	1916.76	0.01	0.63	54.6	1916.76	0.01	0.61	55.5
1916.76	0.01	0.59	56.4	1916.76	0.01	0.58	57.3	1916.76	0.01	0.56	58.3
1916.76	0.01	0.54	59.2	1916.76	0.01	0.53	60.1	1916.76	0.01	0.51	61.0
1916.76	0.01	0.47	61.9	1916.76	0.01	0.42	62.7	1916.76	0.01	0.38	63.6
1916.76	0.01	0.34	64.4	1916.76	0.01	0.30	65.3	1916.76	0.01	0.25	66.1
1916.76	0.01	0.21	66.9	1916.76	0.01	-0.42	68.3	1917.28	-0.06	-0.52	69.2
1917.31	-0.06	-1.12	69.7	1917.70	0.00	-1.35	70.7	1917.90	0.00	-1.20	71.0
1918.59	0.00	-0.55	71.9	1919.19	0.00	0.00	72.9	1919.24	0.00	0.00	73.8
1919.29	0.00	0.00	74.8	1919.34	0.00	0.00	75.7	1919.38	0.00	0.00	76.7
1919.43	0.00	0.00	77.6	1919.48	0.00	0.00	78.6	1919.53	0.00	0.00	79.5
1919.57	0.00	0.00	80.5	1919.62	0.00	0.00	81.4	1919.67	0.00	0.00	82.4
1919.72	0.00	0.00	83.3	1919.76	0.00	0.00	84.3	1919.81	0.00	0.00	85.2
1919.86	0.00	0.00	86.2	1919.91	0.00	0.00	87.1	1919.95	0.00	0.00	88.1
1920.00	0.00	0.00	89.0	1920.05	0.00	0.00	90.0				

## ID

6 SECTION 160.00 TIME = 10.38 HRS WS = 1915.87 WIDTH = 45.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1916.21	0.00	0.00	10.0	1916.18	0.00	0.00	10.9	1916.16	0.00	0.00	11.9
1916.13	0.00	0.00	12.8	1916.11	0.00	0.00	13.8	1916.08	0.00	0.00	14.7
1916.06	0.00	0.00	15.7	1916.03	0.00	0.00	16.6	1916.01	0.00	0.00	17.6
1915.98	0.00	0.00	18.6	1915.96	0.00	0.00	19.5	1915.95	0.00	0.02	20.5
1915.92	0.00	0.02	21.4	1915.91	0.00	0.03	22.4	1915.90	0.00	0.04	23.3
1915.89	0.00	0.05	24.3	1915.89	0.00	0.08	25.2	1915.88	0.00	0.10	26.2
1915.86	0.00	0.10	27.0	1915.79	0.00	0.05	28.0	1915.47	0.00	-0.24	28.7
1915.12	0.00	-0.38	29.5	1915.23	0.00	-0.08	30.5	1915.14	0.00	0.03	31.4
1915.03	0.00	0.12	32.2	1915.02	0.00	0.31	33.0	1915.00	0.00	0.37	33.8
1915.00	0.00	0.44	34.5	1915.00	0.00	0.51	35.2	1914.99	0.00	0.59	36.0
1914.99	0.00	0.60	36.9	1914.99	0.00	0.61	37.9	1914.99	0.00	0.62	38.8
1914.99	0.00	0.63	39.7	1914.99	0.00	0.64	40.7	1914.99	0.00	0.66	41.6
1914.98	0.00	0.67	42.5	1914.98	0.00	0.68	43.5	1914.98	0.00	0.69	44.4
1914.98	0.00	0.70	45.3	1914.98	0.00	0.71	46.3	1914.98	0.00	0.73	47.2
1914.97	0.00	0.74	48.1	1914.97	0.00	0.75	49.1	1914.97	0.00	0.76	50.0
1914.97	0.00	0.75	50.9	1914.97	0.00	0.73	51.8	1914.98	0.00	0.72	52.8
1914.98	0.00	0.71	53.7	1914.98	0.00	0.69	54.6	1914.98	0.00	0.68	55.5
1914.98	0.00	0.66	56.5	1914.98	0.00	0.65	57.4	1914.98	0.00	0.64	58.3
1914.99	0.00	0.62	59.2	1914.99	0.00	0.61	60.2	1914.99	0.00	0.59	61.1
1914.99	0.00	0.58	62.0	1914.99	0.00	0.53	62.8	1914.99	0.00	0.48	63.7
1915.00	0.00	0.44	64.5	1915.00	0.00	0.39	65.3	1915.00	0.00	0.34	66.2
1915.02	0.00	0.31	67.0	1915.03	0.00	0.07	67.8	1915.14	0.00	-0.07	68.5
1915.06	0.00	-0.40	69.6	1915.40	0.00	-0.31	70.3	1915.80	0.00	0.06	71.0
1915.85	0.00	0.09	72.0	1915.88	0.00	0.10	72.8	1915.89	0.00	0.08	73.8
1915.89	0.00	0.06	74.7	1915.90	0.00	0.04	75.7	1915.91	0.00	0.03	76.6
1915.91	0.00	0.01	77.6	1915.92	0.00	0.00	78.6	1915.95	0.00	0.00	79.5
1915.97	0.00	0.00	80.5	1916.00	0.00	0.00	81.4	1916.02	0.00	0.00	82.4
1916.04	0.00	0.00	83.3	1916.07	0.00	0.00	84.3	1916.09	0.00	0.00	85.2
1916.11	0.00	0.00	86.2	1916.14	0.00	0.00	87.1	1916.16	0.00	0.00	88.1
1916.19	0.00	0.00	89.0	1916.21	0.00	0.00	90.0				

ID

5 SECTION 159.00 TIME = 10.38 HRS WS =1912.87 WIDTH = 40.5

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1914.87	0.00	0.00	10.0	1914.84	0.00	0.00	10.9	1914.82	0.00	0.00	11.9
1914.79	0.00	0.00	12.8	1914.77	0.00	0.00	13.8	1914.74	0.00	0.00	14.7
1914.72	0.00	0.00	15.7	1914.69	0.00	0.00	16.6	1914.67	0.00	0.00	17.6
1914.64	0.00	0.00	18.6	1914.62	0.00	0.00	19.5	1914.59	0.00	0.00	20.5
1914.57	0.00	0.00	21.4	1914.54	0.00	0.00	22.4	1914.52	0.00	0.00	23.3
1914.49	0.00	0.00	24.3	1914.47	0.00	0.00	25.2	1914.44	0.00	0.00	26.2
1914.42	0.00	0.00	27.1	1913.88	0.00	-0.52	28.1	1913.19	0.00	-1.18	29.0
1912.88	0.00	-1.19	29.4	1912.61	0.00	-1.16	29.8	1912.56	0.00	-0.91	30.6
1912.04	-0.01	-1.14	32.2	1911.95	-0.01	-0.92	33.0	1911.95	-0.01	-0.84	33.8
1911.95	-0.01	-0.77	34.5	1911.95	-0.01	-0.69	35.2	1911.95	-0.01	-0.62	36.0
1911.95	-0.01	-0.61	36.9	1911.95	-0.01	-0.59	37.9	1911.95	-0.01	-0.58	38.8
1911.95	-0.01	-0.57	39.7	1911.95	-0.01	-0.56	40.7	1911.95	-0.01	-0.54	41.6
1911.95	-0.01	-0.53	42.5	1911.94	-0.01	-0.52	43.5	1911.94	-0.01	-0.51	44.4
1911.94	-0.01	-0.49	45.3	1911.94	-0.01	-0.48	46.3	1911.94	-0.01	-0.47	47.2
1911.94	-0.01	-0.46	48.1	1911.94	-0.01	-0.44	49.1	1911.94	-0.01	-0.43	50.0
1911.94	-0.01	-0.44	50.9	1911.94	-0.01	-0.46	51.9	1911.94	-0.01	-0.47	52.8
1911.94	-0.01	-0.48	53.7	1911.94	-0.01	-0.50	54.6	1911.94	-0.01	-0.51	55.6
1911.94	-0.01	-0.53	56.5	1911.95	-0.01	-0.54	57.4	1911.95	-0.01	-0.55	58.4
1911.95	-0.01	-0.57	59.3	1911.95	-0.01	-0.58	60.2	1911.95	-0.01	-0.59	61.1
1911.95	-0.01	-0.61	62.1	1911.95	-0.01	-0.62	63.0	1911.95	-0.01	-0.68	63.8
1911.95	-0.01	-0.74	64.6	1911.95	-0.01	-0.80	65.4	1911.95	-0.01	-0.86	66.2
1911.95	-0.01	-0.92	67.0	1912.22	0.00	-1.03	68.2	1912.59	0.00	-1.03	69.5
1912.76	0.00	-1.24	69.8	1912.91	0.00	-1.46	70.0	1913.60	0.00	-0.80	71.0
1914.29	0.00	-0.13	71.9	1914.44	0.00	0.00	72.9	1914.47	0.00	0.00	73.8
1914.49	0.00	0.00	74.8	1914.51	0.00	0.00	75.7	1914.54	0.00	0.00	76.7
1914.56	0.00	0.00	77.6	1914.58	0.00	0.00	78.6	1914.61	0.00	0.00	79.5
1914.63	0.00	0.00	80.5	1914.66	0.00	0.00	81.4	1914.68	0.00	0.00	82.4
1914.70	0.00	0.00	83.3	1914.73	0.00	0.00	84.3	1914.75	0.00	0.00	85.2
1914.77	0.00	0.00	86.2	1914.80	0.00	0.00	87.1	1914.82	0.00	0.00	88.1
1914.85	0.00	0.00	89.0	1914.87	0.00	0.00	90.0				

ID

4 SECTION 158.00 TIME = 10.38 HRS WS =1911.60 WIDTH = 39.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1913.53	0.00	0.00	10.0	1913.51	0.00	0.00	10.9	1913.48	0.00	0.00	11.9
1913.45	0.00	0.00	12.8	1913.43	0.00	0.00	13.8	1913.40	0.00	0.00	14.7
1913.38	0.00	0.00	15.7	1913.35	0.00	0.00	16.6	1913.33	0.00	0.00	17.6
1913.30	0.00	0.00	18.6	1913.28	0.00	0.00	19.5	1913.25	0.00	0.00	20.5
1913.23	0.00	0.00	21.4	1913.20	0.00	0.00	22.4	1913.18	0.00	0.00	23.3
1913.15	0.00	0.00	24.3	1913.13	0.00	0.00	25.2	1913.10	0.00	0.00	26.2
1913.08	0.00	0.00	27.1	1912.88	0.00	-0.17	28.1	1912.19	0.00	-0.84	29.0
1911.71	-0.04	-0.92	29.6	1911.57	-0.02	-0.66	29.8	1911.12	0.01	-0.71	30.5
1911.03	0.01	-0.40	31.7	1911.01	0.01	-0.02	33.2	1911.01	0.01	0.08	33.7
1910.76	0.02	-0.07	34.3	1910.71	0.02	-0.02	35.0	1910.67	0.02	-0.05	35.9
1910.66	0.02	-0.05	36.9	1910.65	0.02	-0.05	37.8	1910.63	0.02	-0.04	38.8
1910.62	0.02	-0.04	39.7	1910.61	0.02	-0.04	40.6	1910.60	0.02	-0.04	41.6
1910.59	0.02	-0.04	42.5	1910.58	0.02	-0.04	43.4	1910.57	0.02	-0.04	44.4
1910.56	0.02	-0.03	45.3	1910.56	0.02	-0.02	46.2	1910.55	0.02	-0.01	47.2
1910.55	0.02	0.00	48.1	1910.55	0.02	0.00	49.1	1910.54	0.02	0.01	50.0
1910.55	0.02	0.00	50.9	1910.55	0.02	-0.01	51.9	1910.55	0.02	-0.01	52.8
1910.56	0.02	-0.03	53.7	1910.56	0.02	-0.03	54.7	1910.57	0.02	-0.04	55.6
1910.58	0.02	-0.05	56.5	1910.59	0.02	-0.05	57.5	1910.60	0.02	-0.05	58.4
1910.61	0.02	-0.05	59.3	1910.62	0.02	-0.05	60.3	1910.63	0.02	-0.06	61.2
1910.65	0.02	-0.06	62.1	1910.66	0.02	-0.06	63.1	1910.67	0.02	-0.06	64.0
1910.69	0.02	-0.11	64.8	1910.75	0.02	-0.13	65.5	1911.06	0.01	0.11	66.2

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1911.31	0.01	0.28	66.8	1911.33	-0.05	-0.20	68.3	1911.39	-0.02	-0.64	69.5	
1911.60	-0.02	-0.93	69.7	1911.83	-0.01	-1.20	70.0	1912.52	-0.01	-0.54	71.0	
1913.08	0.00	0.00	71.9	1913.10	0.00	0.00	72.9	1913.13	0.00	0.00	73.8	
1913.15	0.00	0.00	74.8	1913.17	0.00	0.00	75.7	1913.20	0.00	0.00	76.7	
1913.22	0.00	0.00	77.6	1913.24	0.00	0.00	78.6	1913.27	0.00	0.00	79.5	
1913.29	0.00	0.00	80.5	1913.32	0.00	0.00	81.4	1913.34	0.00	0.00	82.4	
1913.36	0.00	0.00	83.3	1913.39	0.00	0.00	84.3	1913.41	0.00	0.00	85.2	
1913.43	0.00	0.00	86.2	1913.46	0.00	0.00	87.1	1913.48	0.00	0.00	88.1	
1913.51	0.00	0.00	89.0	1913.53	0.00	0.00	90.0					

ID  
3 SECTION 157.00 TIME = 10.38 HRS WS =1910.16 WIDTH = 39.3

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1912.68	0.00	0.00	10.0	1912.63	0.00	0.00	10.9	1912.58	0.00	0.00	11.9	
1912.53	0.00	0.00	12.8	1912.48	0.00	0.00	13.8	1912.43	0.00	0.00	14.7	
1912.38	0.00	0.00	15.7	1912.33	0.00	0.00	16.6	1912.28	0.00	0.00	17.6	
1912.23	0.00	0.00	18.6	1912.18	0.00	0.00	19.5	1912.13	0.00	0.00	20.5	
1912.08	0.00	0.00	21.4	1912.03	0.00	0.00	22.4	1911.98	0.00	0.00	23.3	
1911.93	0.00	0.00	24.3	1911.88	0.00	0.00	25.2	1911.83	0.00	0.00	26.2	
1911.70	0.00	-0.08	27.1	1911.01	0.00	-0.71	28.1	1910.46	0.00	-1.22	28.8	
1910.39	0.00	-0.79	29.1	1910.09	0.03	-0.59	30.0	1909.90	0.00	-0.28	30.7	
1909.86	-0.01	0.18	31.3	1909.87	-0.01	0.69	33.1	1909.86	-0.01	0.78	33.7	
1909.85	-0.01	0.87	34.3	1909.89	-0.01	1.01	35.0	1909.89	-0.01	1.03	35.9	
1909.70	-0.01	0.85	36.9	1909.50	-0.02	0.65	37.8	1909.24	-0.03	0.41	38.8	
1909.02	-0.03	0.20	39.7	1908.97	-0.04	0.16	40.6	1908.95	-0.04	0.15	41.6	
1908.93	-0.04	0.15	42.5	1908.91	-0.04	0.14	43.4	1908.90	-0.05	0.15	44.4	
1908.89	-0.05	0.15	45.3	1908.88	-0.05	0.15	46.2	1908.87	-0.05	0.15	47.2	
1908.86	-0.05	0.15	48.1	1908.85	-0.05	0.15	49.1	1908.84	-0.06	0.16	50.0	
1908.85	-0.06	0.15	50.9	1908.86	-0.05	0.15	51.9	1908.87	-0.05	0.15	52.8	
1908.88	-0.05	0.15	53.7	1908.89	-0.05	0.15	54.7	1908.90	-0.05	0.14	55.6	
1908.91	-0.04	0.14	56.5	1908.93	-0.04	0.14	57.5	1908.95	-0.04	0.15	58.4	
1908.97	-0.04	0.15	59.3	1909.00	-0.04	0.18	60.3	1909.23	-0.03	0.39	61.2	
1909.48	-0.02	0.63	62.1	1909.71	-0.01	0.84	63.1	1909.91	-0.01	1.03	64.0	
1909.97	0.00	1.02	64.8	1910.03	0.00	1.00	65.5	1910.03	0.00	0.93	66.2	
1909.97	0.00	0.79	67.5	1910.09	0.02	0.29	68.6	1910.20	0.00	-0.23	69.2	
1910.30	0.00	-0.75	69.6	1910.45	0.00	-1.23	70.7	1910.60	0.00	-1.10	71.0	
1911.29	0.00	-0.44	71.9	1911.75	0.00	0.00	72.9	1911.78	0.00	0.00	73.8	
1911.80	0.00	0.00	74.8	1911.82	0.00	0.00	75.7	1911.85	0.00	0.00	76.7	
1911.87	0.00	0.00	77.6	1911.89	0.00	0.00	78.6	1911.92	0.00	0.00	79.5	
1911.94	0.00	0.00	80.5	1911.97	0.00	0.00	81.4	1911.99	0.00	0.00	82.4	
1912.01	0.00	0.00	83.3	1912.04	0.00	0.00	84.3	1912.06	0.00	0.00	85.2	
1912.08	0.00	0.00	86.2	1912.11	0.00	0.00	87.1	1912.13	0.00	0.00	88.1	
1912.16	0.00	0.00	89.0	1912.18	0.00	0.00	90.0					

ID  
2 SECTION 156.00 TIME = 10.38 HRS WS =1907.18 WIDTH = 19.8

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1910.84	0.00	0.00	10.0	1910.79	0.00	0.00	10.9	1910.74	0.00	0.00	11.9	
1910.69	0.00	0.00	12.8	1910.64	0.00	0.00	13.8	1910.59	0.00	0.00	14.7	
1910.54	0.00	0.00	15.7	1910.49	0.00	0.00	16.6	1910.44	0.00	0.00	17.6	
1910.39	0.00	0.00	18.6	1910.34	0.00	0.00	19.5	1910.29	0.00	0.00	20.5	
1910.24	0.00	0.00	21.4	1910.19	0.00	0.00	22.4	1910.14	0.00	0.00	23.3	
1910.09	0.00	0.00	24.3	1910.04	0.00	0.00	25.2	1909.99	0.00	0.00	26.2	
1909.94	0.00	0.00	27.1	1909.89	0.00	0.00	28.1	1909.84	0.00	0.00	29.0	
1909.34	0.00	0.00	29.8	1908.84	0.00	0.00	30.6	1908.34	0.00	0.00	31.4	
1908.04	0.00	0.20	32.4	1907.91	0.00	0.57	33.5	1907.78	0.00	0.54	34.0	
1907.63	0.00	0.49	34.8	1907.51	0.00	0.47	35.3	1907.30	0.00	0.28	36.4	
1907.29	0.00	0.27	37.6	1907.27	0.00	0.27	38.5	1907.24	0.00	0.25	39.5	

1907.15	0.01	0.17	40.4	1906.99	0.02	0.02	40.6	1906.32	0.03	-0.64	41.6
1905.65	0.04	-1.29	42.5	1905.60	0.03	-1.33	43.4	1905.60	0.03	-1.32	44.4
1905.59	0.03	-1.31	45.3	1905.59	0.03	-1.30	46.2	1905.59	0.03	-1.29	47.2
1905.59	0.03	-1.27	48.1	1905.59	0.03	-1.26	49.1	1905.59	0.03	-1.25	50.0
1905.59	0.03	-1.26	50.9	1905.59	0.03	-1.27	51.9	1905.59	0.03	-1.29	52.8
1905.59	0.03	-1.30	53.7	1905.59	0.03	-1.31	54.7	1905.60	0.03	-1.32	55.6
1905.60	0.03	-1.34	56.5	1905.64	0.04	-1.30	57.5	1906.32	0.03	-0.64	58.4
1907.01	0.01	0.04	59.3	1907.15	0.01	0.17	59.5	1907.24	0.00	0.24	60.4
1907.27	0.00	0.26	61.5	1907.29	0.00	0.27	62.3	1907.32	0.00	0.28	63.9
1907.51	0.00	0.40	64.3	1907.69	0.00	0.51	65.1	1907.81	0.00	0.54	66.0
1907.94	0.00	0.60	66.6	1908.04	0.00	0.08	67.6	1908.66	0.00	0.07	68.5
1909.20	0.00	-0.01	69.2	1909.75	0.00	-0.09	70.0	1909.89	0.00	0.00	71.0
1909.94	0.00	0.00	71.9	1909.98	0.00	0.00	72.9	1910.03	0.00	0.00	73.8
1910.08	0.00	0.00	74.8	1910.13	0.00	0.00	75.7	1910.17	0.00	0.00	76.7
1910.22	0.00	0.00	77.6	1910.27	0.00	0.00	78.6	1910.32	0.00	0.00	79.5
1910.36	0.00	0.00	80.5	1910.41	0.00	0.00	81.4	1910.46	0.00	0.00	82.4
1910.51	0.00	0.00	83.3	1910.55	0.00	0.00	84.3	1910.60	0.00	0.00	85.2
1910.65	0.00	0.00	86.2	1910.70	0.00	0.00	87.1	1910.74	0.00	0.00	88.1
1910.79	0.00	0.00	89.0	1910.84	0.00	0.00	90.0				

ID  
1 SECTION 155.00 TIME = 10.38 HRS WS =1907.08 WIDTH = 38.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1909.00	0.00	0.00	10.0	1908.95	0.00	0.00	10.9	1908.90	0.00	0.00	11.9
1908.85	0.00	0.00	12.8	1908.80	0.00	0.00	13.8	1908.75	0.00	0.00	14.7
1908.70	0.00	0.00	15.7	1908.65	0.00	0.00	16.6	1908.60	0.00	0.00	17.6
1908.55	0.00	0.00	18.6	1908.50	0.00	0.00	19.5	1908.45	0.00	0.00	20.5
1908.40	0.00	0.00	21.4	1908.35	0.00	0.00	22.4	1908.30	0.00	0.00	23.3
1908.25	0.00	0.00	24.3	1908.20	0.00	0.00	25.2	1908.15	0.00	0.00	26.2
1908.10	0.00	0.00	27.1	1908.05	0.00	0.00	28.1	1908.00	0.00	0.00	29.0
1907.50	0.00	0.00	29.8	1907.00	0.00	0.00	30.6	1906.50	0.00	0.00	31.4
1906.00	0.00	0.00	32.2	1905.50	0.00	0.00	33.0	1905.40	0.00	0.00	33.7
1905.30	0.00	0.00	34.3	1905.20	0.00	0.00	35.0	1905.19	0.00	0.00	35.9
1905.18	0.00	0.00	36.9	1905.16	0.00	0.00	37.8	1905.15	0.00	0.00	38.8
1905.14	0.01	0.00	39.7	1905.13	0.02	0.00	40.6	1905.11	0.03	0.00	41.6
1905.10	0.04	0.00	42.5	1905.09	0.03	0.00	43.4	1905.08	0.03	0.00	44.4
1905.06	0.03	0.00	45.3	1905.05	0.03	0.00	46.2	1905.04	0.03	0.00	47.2
1905.03	0.03	0.00	48.1	1905.01	0.03	0.00	49.1	1905.00	0.03	0.00	50.0
1905.01	0.03	0.00	50.9	1905.02	0.03	0.00	51.9	1905.04	0.03	0.00	52.8
1905.05	0.03	0.00	53.8	1905.06	0.03	0.00	54.7	1905.07	0.03	0.00	55.6
1905.09	0.03	0.00	56.6	1905.10	0.04	0.00	57.5	1905.11	0.03	0.00	58.4
1905.12	0.01	0.00	59.4	1905.14	0.01	0.00	60.3	1905.15	0.00	0.00	61.2
1905.16	0.00	0.00	62.2	1905.17	0.00	0.00	63.1	1905.19	0.00	0.00	64.1
1905.20	0.00	0.00	65.0	1905.30	0.00	0.00	65.7	1905.40	0.00	0.00	66.3
1905.50	0.00	0.00	67.0	1906.12	0.00	0.00	67.8	1906.75	0.00	0.00	68.5
1907.38	0.00	0.00	69.2	1908.00	0.00	0.00	70.0	1908.05	0.00	0.00	71.0
1908.10	0.00	0.00	71.9	1908.14	0.00	0.00	72.9	1908.19	0.00	0.00	73.8
1908.24	0.00	0.00	74.8	1908.29	0.00	0.00	75.7	1908.33	0.00	0.00	76.7
1908.38	0.00	0.00	77.6	1908.43	0.00	0.00	78.6	1908.48	0.00	0.00	79.5
1908.52	0.00	0.00	80.5	1908.57	0.00	0.00	81.4	1908.62	0.00	0.00	82.4
1908.67	0.00	0.00	83.3	1908.71	0.00	0.00	84.3	1908.76	0.00	0.00	85.2
1908.81	0.00	0.00	86.2	1908.86	0.00	0.00	87.1	1908.90	0.00	0.00	88.1
1908.95	0.00	0.00	89.0	1909.00	0.00	0.00	90.0				

1

TIME = 17.01 HRS DT = 120 SECS TIME STEP = 510

SECTION	W.S.ELEV.	WIDTH	DEPTH	Q	V	SLOPE	D50	QS/Q	FR	SED.	YIELD
FT	FT	FT	CFS	FPS	MM	1000 PPM	TONS				

155.000	1906.96	38.1	1.96	133	2.05	0.000867	0.49	1.10	0.28	0.396E+03
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156.000	1907.06	18.1	1.45	133	5.85	0.010949	0.66	19.59	0.92	0.430E+04					
157.000	1909.80	27.7	1.16	133	5.24	0.012864	0.53	13.97	0.96	0.428E+04					
158.000	1911.18	37.4	0.88	133	4.78	0.013913	0.59	22.16	0.98	0.431E+04					
159.000	1912.74	41.5	0.85	133	4.19	0.010259	0.61	10.03	0.84	0.423E+04					
160.000	1915.64	44.6	0.87	133	4.06	0.010231	0.52	7.76	0.84	0.408E+04					
161.000	1917.74	47.5	0.86	133	4.09	0.011362	0.52	12.11	0.87	0.418E+04					
162.000	1918.87	42.8	0.84	133	4.28	0.011509	0.69	11.21	0.89	0.427E+04					
163.000	1920.87	45.8	0.86	133	4.21	0.011853	0.47	7.76	0.89	0.423E+04					
164.000	1922.09	41.1	0.74	133	4.66	0.014515	0.62	21.96	0.99	0.422E+04					
165.000	1923.33	38.7	0.87	133	4.22	0.009582	0.54	9.22	0.82	0.409E+04					
166.000	1924.36	38.2	0.85	133	4.51	0.011750	0.50	10.61	0.90	0.384E+04					
167.000	1929.26	78.2	0.89	133	3.72	0.015980	0.62	17.45	0.97	0.356E+04					
168.000	1930.47	38.7	1.03	133	3.81	0.006859	0.54	4.71	0.71	0.393E+04					
169.000	1932.23	64.4	0.98	133	3.67	0.011780	0.53	7.00	0.86	0.412E+04					
170.000	1933.89	38.8	0.98	133	4.35	0.010650	0.47	11.16	0.86	0.422E+04					
171.000	1935.58	53.2	0.98	133	4.09	0.013146	0.61	14.91	0.92	0.436E+04					
172.000	1939.18	63.1	1.18	133	3.63	0.011074	0.38	7.32	0.84	0.441E+04					
173.000	1940.25	38.3	1.09	133	4.43	0.011091	0.48	17.13	0.88	0.502E+04					
174.000	1941.29	68.8	1.29	133	2.93	0.006109	0.52	7.95	0.64	0.538E+04					

ID  
19 SECTION 173.00 TIME = 17.01 HRS WS =1940.25 WIDTH = 38.3

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1940.66	0.00	0.00	10.0	1940.41	0.00	0.96	10.9	1940.41	0.00	0.97	11.9
1940.41	0.00	0.98	12.8	1940.40	0.00	0.98	13.8	1940.40	0.00	0.99	14.7
1940.40	0.00	1.00	15.7	1940.39	0.00	1.00	16.6	1940.39	0.00	1.01	17.6
1940.38	0.00	1.01	18.6	1940.37	0.00	1.01	19.5	1940.36	0.00	1.01	20.5
1940.36	0.00	1.02	21.4	1940.36	0.00	1.03	22.4	1940.35	0.00	1.03	23.3
1940.35	0.00	1.03	24.3	1940.33	0.00	1.03	25.2	1940.32	0.00	1.04	26.2
1940.31	0.00	1.03	27.1	1940.29	0.00	1.02	28.1	1940.28	0.00	1.02	29.0
1940.27	0.00	1.13	29.8	1940.26	0.00	1.24	30.6	1940.22	0.00	1.32	31.4
1940.19	0.00	1.41	32.2	1940.08	-0.01	1.42	33.0	1939.97	-0.01	1.33	33.9
1939.80	-0.02	1.19	34.8	1939.59	-0.02	1.00	35.8	1939.40	-0.02	0.84	36.7
1939.37	-0.02	0.84	37.6	1939.34	-0.02	0.83	38.5	1939.31	-0.03	0.83	39.4
1939.29	-0.03	0.83	40.3	1939.26	-0.03	0.83	41.3	1939.24	-0.03	0.83	42.2
1939.22	-0.03	0.84	43.1	1939.20	-0.03	0.84	44.0	1939.18	-0.03	0.85	44.9
1939.16	-0.03	0.86	45.7	1939.15	-0.03	0.87	46.6	1939.14	-0.03	0.90	47.4
1939.14	-0.03	0.92	48.3	1939.13	-0.03	0.94	49.1	1939.13	-0.03	0.97	50.0
1939.13	-0.03	0.94	50.8	1939.14	-0.03	0.91	51.7	1939.14	-0.03	0.88	52.5
1939.15	-0.03	0.85	53.3	1939.16	-0.03	0.83	54.2	1939.18	-0.03	0.82	55.0
1939.20	-0.03	0.81	55.9	1939.22	-0.03	0.81	56.8	1939.24	-0.03	0.81	57.8
1939.26	-0.03	0.81	58.7	1939.29	-0.03	0.81	59.6	1939.31	-0.03	0.81	60.5
1939.34	-0.02	0.82	61.5	1939.37	-0.02	0.83	62.4	1939.40	-0.02	0.83	63.3
1939.61	-0.02	1.02	64.2	1939.81	-0.02	1.20	65.2	1939.97	-0.01	1.33	66.1
1940.08	-0.01	1.42	67.0	1940.19	0.00	1.38	67.8	1940.23	0.00	1.27	68.5
1940.26	0.00	1.15	69.2	1940.27	0.00	1.02	70.0	1940.28	0.00	1.01	70.9
1940.29	0.00	1.01	71.8	1940.31	0.00	1.02	72.7	1940.32	0.00	1.03	73.6
1940.33	0.00	1.03	74.5	1940.34	0.00	1.03	75.5	1940.35	0.00	1.03	76.4
1940.36	0.00	1.02	77.3	1940.36	0.00	1.02	78.2	1940.42	0.00	1.07	79.1
1940.66	0.00	0.00	80.0								

ID  
18 SECTION 172.00 TIME = 17.01 HRS WS =1939.18 WIDTH = 63.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1939.61	0.00	0.00	10.0	1939.33	0.00	1.82	10.9	1939.32	0.00	1.82	12.3
1939.31	0.00	1.83	13.0	1939.24	0.00	1.76	13.8	1939.12	0.00	1.65	14.6
1939.07	0.01	1.61	15.9	1938.92	0.01	1.47	16.6	1938.92	0.01	1.48	17.6
1938.91	0.01	1.48	18.6	1938.91	0.01	1.49	19.5	1938.92	0.01	1.51	20.5

1938.89	0.01	1.49	21.4	1938.99	0.01	1.60	22.4	1938.98	0.01	1.60	23.3
1938.98	0.01	1.61	24.3	1938.98	0.01	1.62	25.2	1938.98	0.01	1.64	26.2
1938.88	0.01	1.54	27.1	1938.96	0.01	1.63	28.1	1938.96	0.01	1.64	29.0
1938.97	0.01	1.75	29.8	1938.97	0.01	1.85	30.6	1938.87	0.01	1.85	31.4
1938.97	0.01	2.05	32.2	1938.95	0.01	2.13	33.0	1938.94	0.01	2.15	33.9
1938.95	0.01	2.19	34.8	1938.85	0.01	2.12	35.7	1938.86	0.01	2.15	36.6
1938.63	0.02	1.94	37.5	1938.30	0.02	1.64	38.5	1938.06	0.02	1.43	39.4
1938.05	0.02	1.44	40.3	1938.04	0.02	1.47	41.2	1938.04	0.02	1.49	42.1
1938.04	0.02	1.52	43.0	1938.04	0.02	1.54	43.9	1938.04	0.02	1.56	44.8
1938.03	0.02	1.59	45.6	1938.03	0.02	1.61	46.5	1938.03	0.02	1.63	47.4
1938.03	0.02	1.66	48.2	1938.02	0.02	1.68	49.1	1938.02	0.02	1.70	50.0
1938.02	0.02	1.67	50.8	1938.03	0.02	1.64	51.7	1938.03	0.02	1.61	52.5
1938.03	0.02	1.58	53.3	1938.03	0.02	1.55	54.2	1938.03	0.02	1.51	55.0
1938.04	0.02	1.49	55.9	1938.04	0.02	1.47	56.8	1938.04	0.02	1.45	57.8
1938.04	0.02	1.43	58.7	1938.05	0.02	1.41	59.6	1938.06	0.02	1.40	60.5
1938.41	0.02	1.73	61.5	1938.69	0.02	1.99	62.4	1938.90	0.01	2.17	63.3
1938.89	0.01	2.14	64.2	1938.96	0.01	2.19	65.2	1938.95	0.01	2.16	66.1
1938.94	0.01	2.12	67.0	1938.94	0.01	2.00	67.8	1938.93	0.01	1.86	68.5
1938.95	0.01	1.75	69.2	1938.96	0.01	1.64	70.0	1938.98	0.01	1.65	70.9
1939.00	0.01	1.64	71.8	1938.99	0.01	1.62	72.7	1938.98	0.01	1.59	73.6
1939.01	0.01	1.60	74.5	1939.10	0.01	1.67	75.4	1939.11	0.01	1.66	76.4
1939.12	0.00	1.66	77.1	1939.32	0.00	1.84	77.8	1939.33	0.00	1.82	79.0
1939.61	0.00	80.0									

ID  
17 SECTION 171.00 TIME = 17.01 HRS WS =1935.58 WIDTH = 53.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1936.46	0.00	0.00	10.0	1936.19	0.00	0.44	10.9	1936.13	0.00	0.39	11.9
1936.04	0.00	0.32	12.8	1936.03	0.00	0.32	13.8	1936.03	0.00	0.34	14.7
1936.03	0.00	0.35	15.7	1936.02	0.00	0.36	16.6	1936.02	0.00	0.37	17.6
1936.02	0.00	0.39	18.6	1936.02	0.00	0.40	19.5	1936.04	0.00	0.43	20.5
1936.01	0.00	0.42	21.4	1935.79	0.00	0.22	22.4	1935.39	0.01	-0.17	22.9
1935.32	0.00	-0.23	23.7	1935.33	0.00	-0.21	24.6	1935.35	0.00	-0.16	25.5
1935.35	0.00	-0.15	26.3	1935.33	0.00	-0.15	27.4	1935.32	0.00	-0.15	28.4
1935.32	0.00	-0.05	29.2	1935.35	0.00	0.07	29.8	1935.31	0.00	0.14	31.4
1935.35	0.00	0.28	32.2	1935.33	0.00	0.36	33.0	1935.11	-0.01	0.17	33.9
1934.91	-0.01	0.00	34.8	1934.87	-0.01	-0.01	35.7	1934.83	-0.02	-0.02	36.6
1934.79	-0.02	-0.03	37.5	1934.75	-0.02	-0.04	38.4	1934.70	-0.02	-0.06	39.3
1934.66	-0.02	-0.07	40.2	1934.64	-0.02	-0.05	41.1	1934.64	-0.02	-0.03	42.0
1934.63	-0.02	-0.02	42.9	1934.62	-0.02	0.00	43.8	1934.62	-0.02	0.01	44.7
1934.61	-0.02	0.03	45.6	1934.60	-0.03	0.05	46.4	1934.60	-0.03	0.06	47.3
1934.59	-0.03	0.07	48.2	1934.58	-0.03	0.09	49.1	1934.57	-0.03	0.10	50.0
1934.58	-0.03	0.08	50.8	1934.59	-0.03	0.05	51.7	1934.59	-0.03	0.02	52.5
1934.60	-0.03	0.00	53.3	1934.61	-0.02	-0.03	54.2	1934.61	-0.02	-0.06	55.0
1934.62	-0.02	-0.07	55.9	1934.63	-0.02	-0.09	56.8	1934.64	-0.02	-0.11	57.8
1934.64	-0.02	-0.12	58.7	1934.65	-0.02	-0.14	59.6	1934.69	-0.02	-0.11	60.5
1934.74	-0.02	-0.09	61.5	1934.78	-0.02	-0.07	62.4	1934.82	-0.02	-0.05	63.3
1934.86	-0.01	-0.04	64.2	1934.90	-0.01	-0.02	65.2	1935.14	-0.01	0.19	66.1
1935.34	0.00	0.37	67.0	1935.31	-0.01	0.21	67.8	1935.37	0.00	0.15	69.3
1935.40	0.00	0.05	69.8	1935.39	0.00	-0.08	70.7	1935.39	0.00	-0.11	71.7
1935.39	0.00	-0.13	72.6	1935.40	0.00	-0.15	73.6	1935.41	0.00	-0.16	74.3
1935.43	0.00	-0.16	75.2	1935.50	0.01	-0.12	75.8	1936.07	0.00	0.42	76.6
1936.13	0.00	0.46	77.5	1936.14	0.00	0.45	78.4	1936.15	0.00	0.43	79.4
1936.15	0.00	0.40	80.3	1936.16	0.00	0.39	81.2	1936.19	0.00	0.39	82.2
1936.19	0.00	0.37	83.0	1936.21	0.00	0.36	83.9	1936.46	0.00	0.00	85.0

ID  
16 SECTION 170.00 TIME = 17.01 HRS WS =1933.89 WIDTH = 38.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1934.70	0.00	0.00	10.0	1934.37	0.00	0.36	10.8	1934.32	0.00	0.32	12.0
1934.23	0.00	0.27	12.9	1934.24	0.00	0.29	13.8	1934.24	0.00	0.31	14.6
1934.23	0.00	0.32	15.7	1934.24	0.00	0.35	16.6	1934.23	0.00	0.36	17.6
1934.23	0.00	0.38	18.6	1934.23	0.00	0.40	19.4	1934.23	0.00	0.42	20.2
1934.23	0.00	0.44	20.9	1934.23	0.00	0.46	21.7	1934.24	0.00	0.49	22.9
1934.24	0.00	0.51	23.9	1934.23	0.00	0.52	25.2	1934.24	0.00	0.55	26.2
1934.23	0.00	0.56	27.1	1934.15	0.00	0.50	28.0	1934.00	0.00	0.37	29.0
1933.75	0.00	0.22	29.5	1933.69	0.00	0.26	30.6	1933.63	0.00	0.30	31.0
1933.61	0.00	0.38	32.3	1933.64	0.00	0.51	33.0	1933.40	0.00	0.30	33.7
1933.37	0.00	0.30	34.8	1933.26	0.00	0.23	35.7	1933.15	0.00	0.15	36.6
1933.03	0.00	0.07	37.4	1932.92	0.01	-0.01	38.3	1932.92	0.01	0.02	39.2
1932.92	0.01	0.06	40.1	1932.92	0.01	0.09	41.0	1932.92	0.01	0.11	41.9
1932.92	0.01	0.13	42.8	1932.92	0.01	0.15	43.7	1932.92	0.01	0.17	44.6
1932.92	0.01	0.19	45.5	1932.92	0.01	0.21	46.4	1932.92	0.01	0.23	47.3
1932.92	0.01	0.25	48.2	1932.92	0.01	0.27	49.1	1932.92	0.01	0.29	50.0
1932.92	0.01	0.26	50.9	1932.92	0.01	0.23	51.7	1932.92	0.01	0.20	52.6
1932.92	0.01	0.17	53.4	1932.92	0.01	0.15	54.3	1932.92	0.01	0.12	55.1
1932.92	0.01	0.09	56.0	1932.92	0.01	0.07	56.9	1932.92	0.01	0.04	57.8
1932.92	0.01	0.01	58.8	1932.92	0.01	-0.01	59.7	1932.92	0.01	-0.04	60.6
1932.92	0.01	-0.06	61.5	1933.02	0.00	0.01	62.4	1933.14	0.00	0.11	63.3
1933.25	0.00	0.20	64.3	1933.36	0.00	0.28	65.2	1933.50	0.00	0.39	66.1
1933.70	0.00	0.57	67.3	1933.83	0.00	0.50	67.9	1934.26	0.00	0.73	68.5
1934.31	0.00	0.58	69.6	1934.32	0.00	0.39	70.4	1934.33	0.00	0.41	71.6
1934.34	0.00	0.42	72.4	1934.34	0.00	0.42	73.1	1934.35	0.00	0.44	74.1
1934.34	0.00	0.43	74.8	1934.34	0.00	0.44	75.7	1934.34	0.00	0.45	76.7
1934.34	0.00	0.45	77.6	1934.34	0.00	0.46	78.6	1934.34	0.00	0.46	79.5
1934.35	0.00	0.47	80.5	1934.36	0.00	0.49	81.5	1934.36	0.00	0.50	82.4
1934.36	0.00	0.50	83.3	1934.36	0.00	0.51	84.3	1934.37	0.00	0.52	85.2
1934.39	0.00	0.54	86.1	1934.40	0.00	0.56	87.0	1934.42	0.00	0.58	88.0
1934.42	0.00	0.59	88.9	1934.70	0.00	0.00	90.0				

ID  
 15 SECTION 169.00 TIME = 17.01 HRS WS = 1932.23 WIDTH = 64.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1932.73	0.00	0.00	10.0	1932.31	0.00	0.05	10.9	1932.01	0.02	-0.23	11.2
1931.99	0.00	-0.22	12.9	1931.99	0.00	-0.20	13.8	1931.99	0.00	-0.17	14.9
1931.99	0.00	-0.15	15.7	1931.98	0.00	-0.13	16.5	1931.99	0.00	-0.10	17.3
1931.99	0.00	-0.07	18.6	1931.99	0.00	-0.05	19.3	1931.99	0.00	-0.02	20.1
1931.99	0.00	0.00	21.3	1931.99	0.00	0.03	22.4	1931.99	0.00	0.05	23.1
1931.99	0.00	0.08	23.9	1931.99	0.00	0.10	24.9	1931.99	0.00	0.12	26.2
1931.99	0.00	0.15	27.1	1931.99	0.00	0.18	28.1	1931.98	0.00	0.20	29.0
1931.99	0.00	0.30	29.8	1931.99	0.00	0.40	30.6	1931.99	0.00	0.50	31.3
1931.99	0.00	0.60	32.2	1931.73	0.01	0.44	32.8	1931.82	0.01	0.56	33.9
1931.75	0.01	0.52	34.8	1931.67	0.01	0.48	35.7	1931.58	0.01	0.43	36.6
1931.49	0.01	0.36	37.4	1931.38	0.01	0.29	38.3	1931.29	0.01	0.24	39.2
1931.29	0.01	0.27	40.1	1931.29	0.01	0.30	41.0	1931.28	0.01	0.31	41.9
1931.28	0.01	0.33	42.8	1931.28	0.01	0.35	43.7	1931.28	0.01	0.37	44.6
1931.27	0.01	0.38	45.5	1931.27	0.01	0.40	46.4	1931.27	0.01	0.42	47.3
1931.26	0.01	0.44	48.2	1931.26	0.01	0.45	49.1	1931.26	0.01	0.47	50.0
1931.26	0.01	0.44	50.9	1931.26	0.01	0.42	51.7	1931.27	0.01	0.39	52.6
1931.27	0.01	0.37	53.4	1931.27	0.01	0.34	54.3	1931.28	0.01	0.31	55.1
1931.28	0.01	0.29	56.0	1931.28	0.01	0.27	56.9	1931.28	0.01	0.24	57.8
1931.29	0.01	0.22	58.8	1931.29	0.01	0.20	59.7	1931.29	0.01	0.18	60.6
1931.36	0.01	0.22	61.5	1931.47	0.01	0.30	62.4	1931.57	0.01	0.38	63.3
1931.66	0.01	0.45	64.3	1931.74	0.01	0.50	65.2	1931.81	0.01	0.55	66.1
1931.92	0.00	0.63	67.0	1931.91	0.00	0.42	67.8	1931.92	0.00	0.23	68.5
1931.92	0.00	0.03	69.5	1931.92	0.00	-0.17	70.3	1931.93	0.00	-0.17	71.3
1932.03	0.00	-0.08	71.9	1932.03	0.00	-0.09	73.3	1932.01	0.00	-0.12	74.3
1932.07	0.02	-0.07	74.8	1932.37	0.00	0.23	75.7	1932.38	0.00	0.23	76.7

1932.39	0.00	0.22	77.6	1932.38	0.00	0.20	78.6	1932.38	0.00	0.20	79.5
1932.39	0.00	0.19	80.5	1932.39	0.00	0.19	81.5	1932.40	0.00	0.19	82.4
1932.40	0.00	0.18	83.3	1932.41	0.00	0.17	84.3	1932.42	0.00	0.18	85.3
1932.45	0.00	0.19	86.2	1932.46	0.00	0.20	87.1	1932.46	0.00	0.19	88.1
1932.49	0.00	0.21	89.0	1932.73	0.00	0.00	90.0				

ID  
14 SECTION 168.00 TIME = 17.01 HRS WS =1930.47 WIDTH = 38.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1931.23	0.00	0.00	10.0	1930.93	0.00	0.50	10.8	1930.85	0.00	0.45	12.0
1930.74	0.00	0.36	12.8	1930.76	0.00	0.41	13.8	1930.74	0.00	0.41	14.7
1930.73	0.00	0.43	15.7	1930.73	0.00	0.45	16.6	1930.73	0.00	0.48	17.3
1930.75	0.00	0.53	18.2	1930.74	0.00	0.54	19.1	1930.74	0.00	0.56	20.4
1930.75	0.00	0.60	21.4	1930.73	0.00	0.61	22.4	1930.73	0.00	0.63	23.3
1930.72	0.00	0.65	24.3	1930.74	0.00	0.69	25.2	1930.73	0.00	0.71	26.2
1930.74	0.00	0.74	27.1	1930.72	0.00	0.75	28.1	1930.73	0.00	0.78	29.0
1930.72	0.00	0.87	29.8	1930.46	-0.02	0.71	30.6	1930.11	-0.01	0.46	31.1
1930.02	0.00	0.47	31.9	1929.82	0.00	0.37	32.7	1929.69	0.00	0.28	33.9
1929.65	0.00	0.27	34.8	1929.66	0.00	0.32	35.6	1929.55	0.00	0.25	36.5
1929.47	0.00	0.20	37.4	1929.46	0.00	0.24	38.2	1929.46	0.00	0.28	39.1
1929.46	0.00	0.31	40.0	1929.46	0.00	0.33	40.9	1929.46	0.00	0.35	41.8
1929.46	0.01	0.37	42.7	1929.46	0.01	0.39	43.6	1929.46	0.01	0.40	44.5
1929.46	0.01	0.42	45.5	1929.46	0.01	0.44	46.4	1929.46	0.01	0.46	47.3
1929.46	0.01	0.48	48.2	1929.46	0.01	0.49	49.1	1929.46	0.02	0.51	50.0
1929.46	0.01	0.48	50.9	1929.46	0.01	0.46	51.7	1929.46	0.01	0.43	52.6
1929.46	0.01	0.40	53.4	1929.46	0.01	0.37	54.3	1929.46	0.01	0.34	55.1
1929.46	0.01	0.31	56.0	1929.46	0.01	0.29	56.9	1929.46	0.01	0.26	57.8
1929.46	0.00	0.24	58.8	1929.46	0.00	0.21	59.7	1929.46	0.00	0.19	60.6
1929.46	0.00	0.16	61.5	1929.47	0.00	0.14	62.4	1929.52	0.00	0.17	63.3
1929.64	0.00	0.26	64.3	1929.70	0.00	0.30	65.2	1929.73	0.00	0.31	66.1
1929.91	0.00	0.46	67.3	1930.05	0.00	0.40	68.1	1930.09	-0.01	0.25	68.8
1930.63	-0.02	0.58	69.6	1930.87	0.00	0.62	70.5	1930.90	0.00	0.64	71.2
1930.91	0.00	0.64	72.0	1930.90	0.00	0.62	72.9	1930.90	0.00	0.62	73.9
1930.91	0.00	0.61	74.8	1930.91	0.00	0.60	75.8	1930.91	0.00	0.60	76.7
1930.91	0.00	0.58	77.6	1930.92	0.00	0.59	78.6	1930.91	0.00	0.56	79.5
1930.91	0.00	0.55	80.5	1930.92	0.00	0.56	81.4	1930.92	0.00	0.55	82.4
1930.91	0.00	0.53	83.3	1930.91	0.00	0.52	84.3	1930.92	0.00	0.52	85.2
1930.94	0.00	0.53	86.1	1930.97	0.00	0.54	87.0	1930.98	0.00	0.55	88.0
1930.99	0.00	0.55	88.8	1931.23	0.00	0.00	90.0				

ID  
13 SECTION 167.00 TIME = 17.01 HRS WS =1929.26 WIDTH = 78.2

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1929.55	0.00	0.00	10.0	1928.85	0.00	0.26	10.7	1928.80	-0.01	0.24	11.9
1928.80	-0.01	0.27	12.5	1928.80	-0.01	0.29	13.5	1928.80	-0.01	0.31	14.8
1928.79	-0.01	0.34	15.7	1928.81	-0.01	0.38	16.7	1928.81	-0.01	0.40	17.6
1928.81	-0.01	0.43	18.5	1928.81	-0.01	0.45	19.4	1928.81	-0.01	0.47	20.3
1928.82	-0.01	0.51	21.4	1928.81	-0.01	0.53	22.4	1928.82	-0.01	0.56	23.3
1928.79	-0.01	0.56	24.3	1928.81	-0.01	0.60	25.2	1928.79	-0.01	0.61	26.2
1928.79	-0.01	0.63	27.1	1928.79	-0.01	0.66	28.1	1928.79	-0.01	0.68	29.0
1928.79	-0.01	0.78	29.8	1928.79	-0.01	0.87	30.6	1928.79	-0.01	0.98	31.4
1928.78	-0.02	1.07	32.2	1928.78	-0.02	1.18	33.0	1928.78	-0.02	1.22	33.9
1928.78	-0.02	1.26	34.7	1928.81	-0.02	1.33	35.6	1928.79	-0.02	1.35	36.4
1928.80	-0.02	1.40	37.3	1928.79	-0.02	1.43	38.1	1928.74	-0.02	1.43	39.0
1928.69	-0.02	1.39	39.9	1928.62	-0.02	1.35	40.8	1928.56	-0.03	1.30	41.8
1928.49	-0.03	1.25	42.7	1928.43	-0.03	1.20	43.6	1928.38	-0.04	1.17	44.5
1928.37	-0.04	1.18	45.4	1928.37	-0.04	1.19	46.3	1928.36	-0.04	1.20	47.3
1928.35	-0.04	1.21	48.2	1928.34	-0.04	1.22	49.1	1928.34	-0.04	1.22	50.0

1928.34	-0.04	1.21	50.9	1928.35	-0.04	1.20	51.8	1928.36	-0.04	1.18	52.7
1928.37	-0.04	1.17	53.6	1928.37	-0.04	1.15	54.4	1928.38	-0.04	1.14	55.3
1928.41	-0.03	1.14	56.2	1928.47	-0.03	1.19	57.1	1928.54	-0.03	1.23	58.0
1928.61	-0.03	1.27	58.9	1928.67	-0.02	1.30	59.8	1928.72	-0.02	1.32	60.7
1928.77	-0.02	1.34	61.6	1928.82	-0.02	1.36	62.5	1928.86	-0.01	1.37	63.4
1928.90	-0.01	1.38	64.3	1928.94	-0.01	1.38	65.2	1928.97	-0.01	1.38	66.1
1929.02	-0.01	1.41	67.0	1929.05	-0.01	1.23	67.8	1929.05	-0.01	1.04	68.5
1929.05	-0.01	0.84	69.4	1929.05	-0.01	0.64	70.0	1929.05	-0.01	0.63	71.0
1929.06	-0.01	0.63	71.9	1929.06	-0.01	0.62	72.9	1929.06	-0.01	0.62	73.8
1929.07	-0.01	0.61	74.8	1929.07	-0.01	0.60	75.7	1929.07	0.00	0.59	76.7
1929.07	0.00	0.58	77.6	1929.07	0.00	0.58	78.6	1929.08	0.00	0.57	79.9
1929.08	0.00	0.56	80.5	1929.08	0.00	0.56	81.5	1929.08	0.00	0.55	82.4
1929.08	0.00	0.54	83.3	1929.12	0.00	0.56	84.7	1929.12	0.00	0.55	85.2
1929.12	0.00	0.55	86.3	1929.14	0.00	0.56	87.2	1929.21	0.01	0.62	88.0
1929.30	0.00	0.70	88.8	1929.55	0.00	0.00	90.0				

ID  
12 SECTION 166.00 TIME = 17.01 HRS WS =1924.36 WIDTH = 38.2

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1927.53	0.00	0.00	10.0	1927.22	0.00	0.01	10.9	1927.20	0.00	0.04	11.9
1927.15	0.00	0.04	12.9	1927.12	0.00	0.06	13.8	1927.11	0.00	0.10	14.7
1927.12	0.00	0.16	15.7	1927.13	0.00	0.22	16.7	1927.11	0.00	0.25	17.6
1927.09	0.00	0.28	18.6	1927.08	0.00	0.32	19.5	1927.07	0.00	0.36	20.5
1927.04	0.00	0.38	21.3	1927.04	0.00	0.43	22.3	1927.04	0.00	0.48	23.3
1927.04	0.00	0.53	24.3	1927.04	0.00	0.58	25.2	1927.01	0.00	0.60	26.2
1926.88	0.00	0.52	27.1	1926.18	0.00	-0.13	28.1	1925.48	0.00	-0.78	29.0
1924.88	-0.01	-1.28	29.8	1924.60	0.00	-1.46	30.1	1924.43	0.01	-1.53	30.3
1924.06	0.02	-1.80	30.9	1923.55	0.02	-2.22	33.0	1923.54	0.02	-2.17	33.9
1923.54	0.02	-2.13	34.7	1923.54	0.02	-2.09	35.6	1923.54	0.02	-2.05	36.4
1923.54	0.02	-2.01	37.3	1923.54	0.02	-1.96	38.1	1923.54	0.02	-1.92	39.0
1923.54	0.02	-1.91	39.9	1923.54	0.02	-1.89	40.8	1923.53	0.02	-1.88	41.8
1923.53	0.02	-1.86	42.7	1923.53	0.02	-1.85	43.6	1923.53	0.02	-1.83	44.5
1923.53	0.02	-1.81	45.4	1923.53	0.02	-1.80	46.3	1923.53	0.02	-1.78	47.3
1923.53	0.02	-1.77	48.2	1923.53	0.02	-1.75	49.1	1923.53	0.02	-1.73	50.0
1923.53	0.02	-1.75	50.9	1923.53	0.02	-1.77	51.8	1923.53	0.02	-1.79	52.7
1923.53	0.02	-1.81	53.6	1923.53	0.02	-1.83	54.5	1923.53	0.02	-1.85	55.4
1923.53	0.02	-1.87	56.3	1923.53	0.02	-1.89	57.2	1923.53	0.02	-1.91	58.1
1923.54	0.02	-1.92	59.0	1923.54	0.02	-1.96	59.9	1923.54	0.02	-1.99	60.8
1923.54	0.02	-2.02	61.7	1923.54	0.02	-2.05	62.6	1923.54	0.02	-2.09	63.4
1923.85	0.01	-1.80	64.3	1923.86	0.01	-1.84	65.2	1923.85	0.01	-1.87	66.1
1923.86	0.01	-1.90	67.3	1924.48	0.00	-1.40	68.9	1924.63	0.00	-1.38	69.1
1924.78	0.00	-1.35	69.2	1925.33	0.00	-0.93	70.0	1926.02	0.00	-0.26	71.0
1926.71	0.00	0.40	71.9	1926.97	0.00	0.64	72.9	1926.99	0.00	0.63	73.8
1927.00	0.00	0.62	74.8	1927.02	0.00	0.62	75.7	1927.03	0.00	0.61	76.7
1927.05	0.00	0.60	77.6	1927.03	0.00	0.56	78.6	1927.05	0.00	0.55	79.5
1927.04	0.00	0.52	80.5	1927.05	0.00	0.50	81.4	1927.08	0.00	0.51	82.4
1927.08	0.00	0.49	83.3	1927.10	0.00	0.49	84.3	1927.11	0.00	0.47	85.3
1927.14	0.00	0.47	86.2	1927.15	0.00	0.46	87.1	1927.17	0.00	0.46	88.0
1927.26	0.00	0.52	88.9	1927.53	0.00	0.00	90.0				

ID  
11 SECTION 165.00 TIME = 17.01 HRS WS =1923.33 WIDTH = 38.7

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1925.42	0.00	0.00	10.0	1925.40	0.00	0.00	10.9	1925.37	0.00	0.00	11.9
1925.34	0.00	0.00	12.8	1925.32	0.00	0.00	13.8	1925.29	0.00	0.00	14.7
1925.27	0.00	0.00	15.7	1925.24	0.00	0.00	16.6	1925.22	0.00	0.00	17.6
1925.19	0.00	0.00	18.6	1925.17	0.00	0.00	19.5	1925.14	0.00	0.00	20.5
1925.12	0.00	0.00	21.4	1925.09	0.00	0.00	22.4	1925.07	0.00	0.00	23.3

1925.04	0.00	0.00	24.3	1925.02	0.00	0.00	25.2	1924.99	0.00	0.00	26.2
1924.56	0.00	-0.41	27.1	1923.97	0.00	-0.98	27.9	1923.86	0.00	-1.06	28.1
1923.77	0.00	-0.94	29.2	1923.76	0.00	-0.76	29.4	1922.98	-0.05	-1.34	31.2
1922.93	-0.05	-1.19	31.8	1922.46	0.01	-1.46	33.0	1922.46	0.01	-1.41	33.8
1922.46	0.01	-1.36	34.7	1922.46	0.01	-1.31	35.5	1922.46	0.01	-1.26	36.3
1922.46	0.01	-1.21	37.2	1922.46	0.01	-1.16	38.0	1922.46	0.01	-1.14	38.9
1922.46	0.01	-1.13	39.8	1922.46	0.01	-1.11	40.8	1922.46	0.01	-1.10	41.7
1922.46	0.01	-1.08	42.6	1922.46	0.01	-1.07	43.5	1922.46	0.01	-1.05	44.5
1922.46	0.01	-1.03	45.4	1922.46	0.01	-1.02	46.3	1922.46	0.01	-1.00	47.2
1922.46	0.01	-0.99	48.2	1922.46	0.01	-0.97	49.1	1922.46	0.01	-0.96	50.0
1922.46	0.01	-0.98	50.9	1922.46	0.01	-1.00	51.8	1922.46	0.01	-1.02	52.7
1922.46	0.01	-1.04	53.6	1922.46	0.01	-1.06	54.5	1922.46	0.01	-1.08	55.4
1922.46	0.01	-1.10	56.3	1922.46	0.01	-1.12	57.2	1922.46	0.01	-1.14	58.1
1922.46	0.01	-1.16	59.0	1922.46	0.01	-1.19	59.9	1922.46	0.01	-1.22	60.8
1922.46	0.01	-1.26	61.7	1922.46	0.01	-1.29	62.6	1922.46	0.01	-1.32	63.4
1922.46	0.01	-1.36	64.3	1922.46	0.01	-1.39	65.2	1922.46	0.01	-1.42	66.1
1922.46	0.01	-1.46	67.0	1922.95	0.00	-1.10	68.0	1923.09	-0.02	-1.08	68.9
1923.37	-0.04	-0.92	69.2	1923.76	0.00	-0.66	70.0	1923.76	0.00	-0.69	71.4
1923.75	0.00	-0.71	72.5	1923.76	0.00	-0.73	73.5	1923.77	0.00	-0.74	74.4
1923.77	0.00	-0.77	75.1	1923.86	0.00	-0.70	76.4	1924.00	0.00	-0.59	76.7
1924.52	0.00	-0.09	77.7	1924.59	0.00	-0.04	78.6	1924.66	0.00	0.00	79.5
1924.68	0.00	0.00	80.5	1924.71	0.00	0.00	81.4	1924.73	0.00	0.00	82.4
1924.75	0.00	0.00	83.3	1924.78	0.00	0.00	84.3	1924.80	0.00	0.00	85.2
1924.82	0.00	0.00	86.2	1924.85	0.00	0.00	87.1	1924.87	0.00	0.00	88.1
1924.90	0.00	0.00	89.0	1924.95	0.00	0.00	90.0				

ID  
10 SECTION 164.00 TIME = 17.01 HRS WS=1922.09 WIDTH = 41.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1924.08	0.00	0.00	10.0	1924.06	0.00	0.00	10.9	1924.05	0.00	0.00	11.9
1924.03	0.00	0.00	12.8	1924.02	0.00	0.00	13.8	1924.00	0.00	0.00	14.7
1923.99	0.00	0.00	15.7	1923.97	0.00	0.00	16.6	1923.96	0.00	0.00	17.6
1923.94	0.00	0.00	18.6	1923.93	0.00	0.00	19.5	1923.91	0.00	0.00	20.5
1923.90	0.00	0.00	21.4	1923.88	0.00	0.00	22.4	1923.87	0.00	0.00	23.3
1923.85	0.00	0.00	24.3	1923.84	0.00	0.00	25.2	1923.63	0.00	-0.19	26.2
1922.94	0.00	-0.87	27.1	1922.27	0.00	-1.53	28.0	1922.15	0.00	-1.63	28.3
1922.12	0.00	-1.32	29.4	1921.98	0.02	-1.12	29.6	1921.46	-0.02	-1.30	30.4
1921.37	-0.02	-1.05	32.2	1921.36	-0.03	-0.72	33.0	1921.35	-0.03	-0.68	33.8
1921.35	-0.03	-0.63	34.7	1921.35	-0.03	-0.58	35.5	1921.35	-0.03	-0.53	36.3
1921.35	-0.03	-0.48	37.2	1921.34	-0.03	-0.44	38.0	1921.34	-0.03	-0.42	38.9
1921.34	-0.03	-0.41	39.8	1921.34	-0.03	-0.40	40.8	1921.33	-0.03	-0.38	41.7
1921.33	-0.03	-0.37	42.6	1921.33	-0.04	-0.36	43.5	1921.33	-0.04	-0.34	44.5
1921.33	-0.04	-0.33	45.4	1921.32	-0.04	-0.32	46.3	1921.32	-0.04	-0.31	47.2
1921.32	-0.04	-0.29	48.2	1921.32	-0.04	-0.28	49.1	1921.31	-0.04	-0.27	50.0
1921.32	-0.04	-0.28	50.9	1921.32	-0.04	-0.30	51.8	1921.32	-0.04	-0.31	52.7
1921.32	-0.04	-0.33	53.6	1921.32	-0.04	-0.35	54.5	1921.33	-0.04	-0.36	55.5
1921.33	-0.04	-0.38	56.4	1921.33	-0.03	-0.39	57.3	1921.33	-0.03	-0.41	58.2
1921.34	-0.03	-0.42	59.1	1921.34	-0.03	-0.44	60.0	1921.34	-0.03	-0.48	60.9
1921.34	-0.03	-0.51	61.8	1921.35	-0.03	-0.55	62.6	1921.35	-0.03	-0.58	63.5
1921.35	-0.03	-0.62	64.4	1921.35	-0.03	-0.65	65.2	1921.35	-0.03	-0.69	66.1
1921.36	-0.03	-0.72	67.0	1921.37	-0.02	-1.08	67.7	1921.53	-0.02	-1.29	69.6
1921.99	0.02	-1.22	70.3	1922.11	0.00	-1.47	70.5	1922.15	0.00	-1.45	71.6
1922.27	0.00	-1.35	71.9	1922.95	0.00	-0.70	72.9	1923.64	0.00	-0.03	73.8
1923.70	0.00	0.00	74.8	1923.72	0.00	0.00	75.7	1923.75	0.00	0.00	76.7
1923.77	0.00	0.00	77.6	1923.79	0.00	0.00	78.6	1923.82	0.00	0.00	79.5
1923.84	0.00	0.00	80.5	1923.87	0.00	0.00	81.4	1923.89	0.00	0.00	82.4
1923.91	0.00	0.00	83.3	1923.94	0.00	0.00	84.3	1923.96	0.00	0.00	85.2
1923.98	0.00	0.00	86.2	1924.01	0.00	0.00	87.1	1924.03	0.00	0.00	88.1
1924.06	0.00	0.00	89.0	1924.08	0.00	0.00	90.0				

ID

9 SECTION 163.00 TIME = 17.01 HRS WS =1920.87 WIDTH = 45.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1922.74	0.00	0.00	10.0	1922.69	0.00	0.00	10.9	1922.64	0.00	0.00	11.9
1922.59	0.00	0.00	12.8	1922.54	0.00	0.00	13.8	1922.49	0.00	0.00	14.7
1922.44	0.00	0.00	15.7	1922.39	0.00	0.00	16.6	1922.34	0.00	0.00	17.6
1922.29	0.00	0.00	18.6	1922.24	0.00	0.00	19.5	1922.19	0.00	0.00	20.5
1922.14	0.00	0.00	21.4	1922.09	0.00	0.00	22.4	1922.04	0.00	0.00	23.3
1921.89	-0.02	-0.10	24.3	1921.20	0.01	-0.74	25.2	1920.80	0.02	-1.09	25.8
1920.74	0.01	-1.10	26.4	1920.73	0.01	-1.06	27.3	1920.70	0.01	-1.04	28.3
1920.51	0.02	-0.93	28.9	1920.41	0.03	-0.73	29.9	1920.36	0.03	-0.48	31.2
1920.31	0.03	-0.22	32.2	1920.28	0.03	0.04	33.0	1920.24	0.03	0.05	33.8
1920.20	0.03	0.06	34.7	1920.16	0.03	0.07	35.5	1920.11	0.03	0.07	36.3
1920.08	0.03	0.09	37.2	1920.08	0.03	0.14	38.0	1920.07	0.03	0.15	38.9
1920.07	0.03	0.16	39.8	1920.07	0.03	0.17	40.8	1920.07	0.03	0.19	41.7
1920.06	0.03	0.20	42.6	1920.06	0.03	0.21	43.5	1920.06	0.03	0.22	44.5
1920.05	0.03	0.24	45.4	1920.05	0.03	0.25	46.3	1920.05	0.03	0.26	47.2
1920.05	0.03	0.28	48.2	1920.04	0.03	0.29	49.1	1920.04	0.03	0.30	50.0
1920.04	0.03	0.29	50.9	1920.05	0.03	0.27	51.8	1920.05	0.03	0.25	52.7
1920.05	0.03	0.24	53.6	1920.05	0.03	0.22	54.5	1920.06	0.03	0.21	55.5
1920.06	0.03	0.19	56.4	1920.06	0.03	0.18	57.3	1920.06	0.03	0.16	58.2
1920.07	0.03	0.15	59.1	1920.07	0.03	0.13	60.0	1920.07	0.03	0.10	60.9
1920.07	0.03	0.06	61.8	1920.08	0.03	0.02	62.6	1920.10	0.03	0.01	63.5
1920.15	0.03	0.03	64.4	1920.19	0.03	0.03	65.2	1920.24	0.03	0.03	66.1
1920.28	0.03	0.04	67.0	1920.34	0.03	-0.40	68.4	1920.69	0.02	-0.55	69.2
1920.72	0.01	-1.02	70.1	1920.79	0.01	-1.45	70.8	1920.85	0.01	-1.41	71.4
1921.19	0.00	-1.10	71.9	1921.88	0.00	-0.43	72.9	1922.34	0.00	0.00	73.8
1922.36	0.00	0.00	74.8	1922.38	0.00	0.00	75.7	1922.41	0.00	0.00	76.7
1922.43	0.00	0.00	77.6	1922.45	0.00	0.00	78.6	1922.48	0.00	0.00	79.5
1922.50	0.00	0.00	80.5	1922.53	0.00	0.00	81.4	1922.55	0.00	0.00	82.4
1922.57	0.00	0.00	83.3	1922.60	0.00	0.00	84.3	1922.62	0.00	0.00	85.2
1922.64	0.00	0.00	86.2	1922.67	0.00	0.00	87.1	1922.69	0.00	0.00	88.1
1922.72	0.00	0.00	89.0	1922.74	0.00	0.00	90.0				

ID

8 SECTION 162.00 TIME = 17.01 HRS WS =1918.87 WIDTH = 42.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1920.39	0.00	0.00	10.0	1920.38	0.00	0.00	10.9	1920.37	0.00	0.00	11.9
1920.36	0.00	0.00	12.8	1920.35	0.00	0.00	13.8	1920.34	0.00	0.00	14.7
1920.33	0.00	0.00	15.7	1920.32	0.00	0.00	16.6	1920.31	0.00	0.00	17.6
1920.30	0.00	0.00	18.6	1920.29	0.00	0.00	19.5	1920.28	0.00	0.00	20.5
1920.27	0.00	0.00	21.4	1920.26	0.00	0.00	22.4	1920.25	0.00	0.00	23.3
1920.24	0.00	0.00	24.3	1920.23	0.00	0.00	25.2	1919.64	0.00	-0.58	26.2
1918.95	0.00	-1.26	27.1	1918.84	0.00	-1.36	27.3	1918.61	0.00	-1.58	27.8
1918.54	0.00	-1.30	28.8	1918.25	0.00	-1.22	30.0	1918.24	-0.01	-0.87	30.5
1918.20	-0.01	-0.55	32.1	1918.18	-0.01	-0.21	33.0	1918.16	-0.01	-0.17	33.8
1918.14	-0.01	-0.13	34.6	1918.12	-0.01	-0.09	35.4	1918.11	-0.01	-0.04	36.2
1918.11	-0.01	0.02	37.0	1918.10	-0.01	0.02	37.9	1918.09	-0.01	0.02	38.9
1918.07	-0.01	0.03	39.8	1918.06	-0.01	0.03	40.7	1918.06	-0.01	0.04	41.6
1918.05	-0.01	0.05	42.6	1918.05	-0.01	0.06	43.5	1918.04	-0.01	0.07	44.4
1918.04	-0.01	0.07	45.4	1918.03	-0.01	0.09	46.3	1918.03	-0.01	0.09	47.2
1918.02	-0.01	0.10	48.1	1918.02	-0.01	0.11	49.1	1918.01	-0.01	0.12	50.0
1918.02	-0.01	0.11	50.9	1918.02	-0.01	0.09	51.8	1918.03	-0.01	0.08	52.7
1918.03	-0.01	0.07	53.6	1918.04	-0.01	0.05	54.5	1918.04	-0.01	0.04	55.5
1918.05	-0.01	0.03	56.4	1918.05	-0.01	0.02	57.3	1918.06	-0.01	0.00	58.2
1918.06	-0.01	-0.01	59.1	1918.07	-0.01	-0.02	60.0	1918.08	-0.01	-0.04	60.9
1918.09	-0.01	-0.07	61.8	1918.10	-0.01	-0.10	62.6	1918.11	-0.01	-0.13	63.5
1918.12	-0.01	-0.16	64.4	1918.13	-0.01	-0.18	65.2	1918.16	-0.01	-0.20	66.1

1918.19	-0.01	-0.20	67.4	1918.22	-0.01	-0.80	68.6	1918.70	0.00	-0.94	69.5
1918.83	0.00	-1.43	69.9	1918.94	0.00	-1.95	70.3	1919.44	0.00	-1.48	71.0
1920.13	0.00	-0.81	71.9	1920.82	0.00	-0.14	72.9	1920.99	0.00	0.00	73.8
1921.01	0.00	0.00	74.8	1921.03	0.00	0.00	75.7	1921.06	0.00	0.00	76.7
1921.08	0.00	0.00	77.6	1921.10	0.00	0.00	78.6	1921.13	0.00	0.00	79.5
1921.15	0.00	0.00	80.5	1921.18	0.00	0.00	81.4	1921.20	0.00	0.00	82.4
1921.22	0.00	0.00	83.3	1921.25	0.00	0.00	84.3	1921.27	0.00	0.00	85.2
1921.29	0.00	0.00	86.2	1921.32	0.00	0.00	87.1	1921.34	0.00	0.00	88.1
1921.37	0.00	0.00	89.0	1921.39	0.00	0.00	90.0				

ID  
7 SECTION 161.00 TIME = 17.01 HRS WS =1917.74 WIDTH = 47.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1918.06	0.00	0.00	10.0	1918.08	0.00	0.00	10.9	1918.10	0.00	0.00	11.9
1918.13	0.00	0.00	12.8	1918.15	0.00	0.00	13.8	1918.18	0.00	0.00	14.7
1918.20	0.00	0.00	15.7	1918.23	0.00	0.00	16.6	1918.25	0.00	0.00	17.6
1918.28	0.00	0.00	18.6	1918.30	0.00	0.00	19.5	1918.33	0.00	0.00	20.5
1918.35	0.00	0.00	21.4	1918.38	0.00	0.00	22.4	1918.30	0.00	-0.10	23.3
1917.73	0.00	-0.70	24.1	1917.54	0.00	-0.91	24.4	1917.53	0.00	-0.94	25.5
1917.51	0.00	-0.99	26.4	1917.51	0.00	-1.02	27.5	1917.53	0.00	-1.02	28.3
1917.50	0.00	-0.65	29.3	1917.31	0.00	-0.44	30.1	1917.26	0.00	-0.09	31.0
1917.20	0.00	0.25	32.2	1917.15	0.00	0.60	33.0	1917.10	0.00	0.61	33.8
1917.05	0.00	0.62	34.6	1917.02	0.00	0.65	35.4	1916.99	0.00	0.68	36.2
1916.96	0.00	0.71	37.0	1916.93	0.00	0.69	37.9	1916.91	0.00	0.69	38.9
1916.88	0.00	0.68	39.8	1916.88	0.00	0.69	40.7	1916.88	0.00	0.70	41.6
1916.88	0.00	0.72	42.6	1916.88	0.00	0.73	43.5	1916.88	0.00	0.75	44.4
1916.88	0.00	0.76	45.4	1916.88	0.00	0.78	46.3	1916.88	0.00	0.79	47.2
1916.88	0.00	0.80	48.1	1916.88	0.00	0.82	49.1	1916.88	0.00	0.83	50.0
1916.88	0.00	0.82	50.9	1916.88	0.00	0.80	51.8	1916.88	0.00	0.78	52.8
1916.88	0.00	0.77	53.7	1916.88	0.00	0.75	54.6	1916.88	0.00	0.73	55.5
1916.88	0.00	0.72	56.4	1916.88	0.00	0.70	57.3	1916.88	0.00	0.68	58.3
1916.88	0.00	0.67	59.2	1916.88	0.00	0.65	60.1	1916.90	0.00	0.65	61.0
1916.93	0.00	0.63	61.9	1916.95	0.00	0.61	62.7	1916.98	0.00	0.60	63.6
1917.01	0.00	0.59	64.4	1917.04	0.00	0.58	65.3	1917.10	0.00	0.59	66.1
1917.15	0.00	0.60	66.9	1917.22	0.00	0.05	68.3	1917.29	0.00	-0.51	69.2
1917.29	0.00	-1.14	69.9	1917.37	0.01	-1.68	71.1	1917.72	0.00	-1.38	71.6
1917.95	0.00	-1.19	71.9	1918.64	0.00	-0.55	72.9	1919.24	0.00	0.00	73.8
1919.29	0.00	0.00	74.8	1919.34	0.00	0.00	75.7	1919.38	0.00	0.00	76.7
1919.43	0.00	0.00	77.6	1919.48	0.00	0.00	78.6	1919.53	0.00	0.00	79.5
1919.57	0.00	0.00	80.5	1919.62	0.00	0.00	81.4	1919.67	0.00	0.00	82.4
1919.72	0.00	0.00	83.3	1919.76	0.00	0.00	84.3	1919.81	0.00	0.00	85.2
1919.86	0.00	0.00	86.2	1919.91	0.00	0.00	87.1	1919.95	0.00	0.00	88.1
1920.00	0.00	0.00	89.0	1920.05	0.00	0.00	90.0				

ID  
6 SECTION 160.00 TIME = 17.01 HRS WS =1915.64 WIDTH = 44.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1916.21	0.00	0.00	10.0	1916.18	0.00	0.00	10.9	1916.16	0.00	0.00	11.9
1916.13	0.00	0.00	12.8	1916.11	0.00	0.00	13.8	1916.08	0.00	0.00	14.7
1916.06	0.00	0.00	15.7	1916.03	0.00	0.00	16.6	1916.01	0.00	0.00	17.6
1916.00	0.00	0.02	18.6	1915.96	0.00	0.00	19.5	1915.95	0.00	0.02	20.5
1915.95	0.00	0.04	21.4	1915.90	0.00	0.02	22.3	1915.88	0.00	0.02	23.3
1915.86	0.00	0.02	24.3	1915.85	0.00	0.04	25.2	1915.85	0.00	0.06	26.1
1915.82	-0.01	0.06	27.0	1915.30	-0.02	-0.43	27.7	1915.26	-0.03	-0.45	28.4
1915.29	0.01	-0.22	29.5	1915.27	-0.03	-0.04	30.5	1915.28	-0.03	0.17	31.4
1914.99	0.01	0.08	32.2	1914.93	0.01	0.22	33.0	1914.91	0.01	0.27	33.8
1914.89	0.01	0.32	34.5	1914.87	0.01	0.38	35.2	1914.86	0.01	0.45	36.0
1914.84	0.01	0.44	36.9	1914.83	0.01	0.44	37.9	1914.82	0.01	0.45	38.8

1914.82	0.01	0.46	39.7	1914.81	0.01	0.47	40.7	1914.81	0.01	0.48	41.6
1914.81	0.01	0.49	42.5	1914.80	0.01	0.50	43.5	1914.80	0.01	0.51	44.4
1914.80	0.01	0.52	45.3	1914.79	0.02	0.53	46.3	1914.79	0.02	0.54	47.2
1914.79	0.02	0.55	48.1	1914.79	0.02	0.56	49.1	1914.78	0.02	0.57	50.0
1914.79	0.02	0.56	50.9	1914.79	0.02	0.55	51.8	1914.79	0.02	0.53	52.8
1914.79	0.02	0.52	53.7	1914.80	0.01	0.51	54.6	1914.80	0.01	0.50	55.5
1914.80	0.01	0.49	56.5	1914.81	0.01	0.47	57.4	1914.81	0.01	0.46	58.3
1914.81	0.01	0.45	59.2	1914.82	0.01	0.44	60.2	1914.82	0.01	0.42	61.1
1914.83	0.01	0.42	62.0	1914.84	0.01	0.37	62.8	1914.85	0.01	0.34	63.7
1914.87	0.01	0.31	64.5	1914.88	0.01	0.27	65.3	1914.90	0.01	0.24	66.2
1914.93	0.01	0.22	67.0	1914.98	0.01	0.02	67.8	1915.27	0.01	0.06	68.5
1915.20	0.01	-0.26	69.6	1915.26	0.01	-0.45	70.5	1915.29	-0.02	-0.45	71.4
1915.78	-0.01	0.02	72.0	1915.85	0.00	0.07	72.9	1915.85	0.00	0.04	73.8
1915.85	0.00	0.02	74.7	1915.87	0.00	0.02	75.7	1915.88	0.00	0.00	76.6
1915.90	0.00	0.00	77.6	1915.95	0.00	0.02	78.6	1915.95	0.00	0.00	79.5
1915.97	0.00	0.00	80.5	1916.01	0.00	0.01	81.4	1916.02	0.00	0.00	82.4
1916.04	0.00	0.00	83.3	1916.07	0.00	0.00	84.3	1916.09	0.00	0.00	85.2
1916.11	0.00	0.00	86.2	1916.14	0.00	0.00	87.1	1916.16	0.00	0.00	88.1
1916.19	0.00	0.00	89.0	1916.21	0.00	0.00	90.0				

ID  
5 SECTION 159.00 TIME = 17.01 HRS WS =1912.74 WIDTH = 41.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1914.87	0.00	0.00	10.0	1914.84	0.00	0.00	10.9	1914.82	0.00	0.00	11.9
1914.79	0.00	0.00	12.8	1914.77	0.00	0.00	13.8	1914.74	0.00	0.00	14.7
1914.72	0.00	0.00	15.7	1914.69	0.00	0.00	16.6	1914.67	0.00	0.00	17.6
1914.64	0.00	0.00	18.6	1914.62	0.00	0.00	19.5	1914.59	0.00	0.00	20.5
1914.57	0.00	0.00	21.4	1914.54	0.00	0.00	22.4	1914.52	0.00	0.00	23.3
1914.49	0.00	0.00	24.3	1914.47	0.00	0.00	25.2	1914.44	0.00	0.00	26.2
1914.13	0.00	-0.29	27.1	1913.44	0.00	-0.95	28.1	1912.76	0.00	-1.61	29.0
1912.61	-0.03	-1.46	29.2	1912.55	0.00	-1.22	29.5	1912.54	0.00	-0.93	30.6
1911.95	0.00	-1.22	32.2	1911.94	0.00	-0.93	33.0	1911.93	0.00	-0.86	33.8
1911.92	0.00	-0.80	34.5	1911.91	0.00	-0.73	35.2	1911.91	0.00	-0.66	36.0
1911.90	0.00	-0.66	36.9	1911.90	0.00	-0.64	37.9	1911.90	0.00	-0.63	38.8
1911.90	0.00	-0.62	39.7	1911.89	0.00	-0.61	40.7	1911.89	0.00	-0.59	41.6
1911.89	-0.01	-0.58	42.5	1911.89	-0.01	-0.57	43.5	1911.89	-0.01	-0.56	44.4
1911.89	-0.01	-0.55	45.3	1911.89	-0.01	-0.53	46.3	1911.89	-0.01	-0.52	47.2
1911.89	-0.01	-0.51	48.1	1911.88	-0.01	-0.50	49.1	1911.88	-0.01	-0.49	50.0
1911.88	-0.01	-0.50	50.9	1911.89	-0.01	-0.51	51.9	1911.89	-0.01	-0.52	52.8
1911.89	-0.01	-0.54	53.7	1911.89	-0.01	-0.55	54.6	1911.89	-0.01	-0.57	55.6
1911.89	-0.01	-0.58	56.5	1911.89	-0.01	-0.59	57.4	1911.89	-0.01	-0.60	58.4
1911.89	0.00	-0.62	59.3	1911.90	0.00	-0.63	60.2	1911.90	0.00	-0.64	61.1
1911.90	0.00	-0.66	62.1	1911.90	0.00	-0.67	63.0	1911.91	0.00	-0.72	63.8
1911.91	0.00	-0.78	64.6	1911.92	0.00	-0.83	65.4	1911.93	0.00	-0.88	66.2
1911.94	0.00	-0.93	67.0	1912.04	0.00	-1.20	68.2	1912.51	0.00	-1.11	69.4
1912.56	-0.03	-1.44	70.3	1912.74	-0.01	-1.63	70.6	1913.02	0.00	-1.37	71.0
1913.71	0.00	-0.70	71.9	1914.40	0.00	-0.04	72.9	1914.47	0.00	0.00	73.8
1914.49	0.00	0.00	74.8	1914.51	0.00	0.00	75.7	1914.54	0.00	0.00	76.7
1914.56	0.00	0.00	77.6	1914.58	0.00	0.00	78.6	1914.61	0.00	0.00	79.5
1914.63	0.00	0.00	80.5	1914.66	0.00	0.00	81.4	1914.68	0.00	0.00	82.4
1914.70	0.00	0.00	83.3	1914.73	0.00	0.00	84.3	1914.75	0.00	0.00	85.2
1914.77	0.00	0.00	86.2	1914.80	0.00	0.00	87.1	1914.82	0.00	0.00	88.1
1914.85	0.00	0.00	89.0	1914.87	0.00	0.00	90.0				

ID  
4 SECTION 158.00 TIME = 17.01 HRS WS =1911.18 WIDTH = 37.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1913.53	0.00	0.00	10.0	1913.51	0.00	0.00	10.9	1913.48	0.00	0.00	11.9
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1913.45	0.00	0.00	12.8	1913.43	0.00	0.00	13.8	1913.40	0.00	0.00	14.7
1913.38	0.00	0.00	15.7	1913.35	0.00	0.00	16.6	1913.33	0.00	0.00	17.6
1913.30	0.00	0.00	18.6	1913.28	0.00	0.00	19.5	1913.25	0.00	0.00	20.5
1913.23	0.00	0.00	21.4	1913.20	0.00	0.00	22.4	1913.18	0.00	0.00	23.3
1913.15	0.00	0.00	24.3	1913.13	0.00	0.00	25.2	1913.10	0.00	0.00	26.2
1913.08	0.00	0.00	27.1	1912.59	0.00	-0.46	28.1	1911.90	0.00	-1.13	29.0
1911.66	0.00	-0.97	29.3	1911.53	0.00	-0.70	29.7	1911.21	0.00	-0.62	30.4
1910.65	0.01	-0.78	31.2	1910.59	-0.02	-0.44	33.2	1910.56	-0.02	-0.37	33.7
1910.51	-0.02	-0.32	34.3	1910.50	-0.02	-0.24	35.0	1910.47	-0.02	-0.24	35.9
1910.45	-0.03	-0.25	36.9	1910.43	-0.03	-0.26	37.8	1910.41	-0.03	-0.27	38.8
1910.38	-0.03	-0.28	39.7	1910.36	-0.03	-0.30	40.6	1910.33	-0.04	-0.31	41.6
1910.31	-0.04	-0.32	42.5	1910.30	-0.04	-0.32	43.4	1910.29	-0.04	-0.32	44.4
1910.27	-0.04	-0.32	45.3	1910.26	-0.05	-0.32	46.2	1910.25	-0.05	-0.32	47.2
1910.25	-0.05	-0.31	48.1	1910.25	-0.05	-0.30	49.1	1910.25	-0.05	-0.28	50.0
1910.25	-0.05	-0.30	50.9	1910.25	-0.05	-0.31	51.9	1910.25	-0.05	-0.32	52.8
1910.26	-0.05	-0.33	53.7	1910.27	-0.04	-0.33	54.7	1910.28	-0.04	-0.33	55.6
1910.30	-0.04	-0.32	56.5	1910.31	-0.04	-0.32	57.5	1910.33	-0.04	-0.32	58.4
1910.36	-0.03	-0.30	59.3	1910.38	-0.03	-0.29	60.3	1910.41	-0.03	-0.29	61.2
1910.43	-0.03	-0.28	62.1	1910.45	-0.03	-0.27	63.1	1910.47	-0.02	-0.26	64.0
1910.49	-0.02	-0.32	64.8	1910.55	-0.02	-0.33	65.5	1910.78	-0.01	-0.18	66.3
1910.84	0.02	-0.19	67.3	1911.45	0.00	-0.08	68.3	1911.46	0.00	-0.57	69.3
1911.54	0.00	-0.99	69.8	1911.64	0.00	-1.38	70.1	1912.28	0.00	-0.77	71.0
1912.97	0.00	-0.10	71.9	1913.10	0.00	0.00	72.9	1913.13	0.00	0.00	73.8
1913.15	0.00	0.00	74.8	1913.17	0.00	0.00	75.7	1913.20	0.00	0.00	76.7
1913.22	0.00	0.00	77.6	1913.24	0.00	0.00	78.6	1913.27	0.00	0.00	79.5
1913.29	0.00	0.00	80.5	1913.32	0.00	0.00	81.4	1913.34	0.00	0.00	82.4
1913.36	0.00	0.00	83.3	1913.39	0.00	0.00	84.3	1913.41	0.00	0.00	85.2
1913.43	0.00	0.00	86.2	1913.46	0.00	0.00	87.1	1913.48	0.00	0.00	88.1
1913.51	0.00	0.00	89.0	1913.53	0.00	0.00	90.0				

## ID

3 SECTION 157.00 TIME = 17.01 HRS WS =1909.80 WIDTH = 27.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1912.68	0.00	0.00	10.0	1912.63	0.00	0.00	10.9	1912.58	0.00	0.00	11.9
1912.53	0.00	0.00	12.8	1912.48	0.00	0.00	13.8	1912.43	0.00	0.00	14.7
1912.38	0.00	0.00	15.7	1912.33	0.00	0.00	16.6	1912.28	0.00	0.00	17.6
1912.23	0.00	0.00	18.6	1912.18	0.00	0.00	19.5	1912.13	0.00	0.00	20.5
1912.08	0.00	0.00	21.4	1912.03	0.00	0.00	22.4	1911.98	0.00	0.00	23.3
1911.93	0.00	0.00	24.3	1911.88	0.00	0.00	25.2	1911.83	0.00	0.00	26.2
1911.51	0.00	-0.27	27.1	1910.81	0.00	-0.91	28.1	1910.26	0.00	-1.42	28.8
1910.20	0.00	-0.98	29.1	1910.15	0.00	-0.53	29.5	1910.09	0.00	-0.09	30.6
1910.02	0.00	0.34	31.2	1909.96	0.00	0.78	33.1	1909.90	0.00	0.82	33.7
1909.92	0.00	0.94	34.3	1909.96	0.00	1.08	35.0	1909.93	0.00	1.07	35.9
1909.93	0.00	1.08	36.9	1909.86	0.00	1.02	37.8	1909.28	0.02	0.45	38.8
1908.75	0.03	-0.07	39.7	1908.74	0.03	-0.07	40.6	1908.73	0.03	-0.06	41.6
1908.73	0.03	-0.05	42.5	1908.72	0.03	-0.05	43.4	1908.71	0.03	-0.04	44.4
1908.70	0.03	-0.04	45.3	1908.70	0.03	-0.03	46.2	1908.69	0.03	-0.03	47.2
1908.68	0.03	-0.02	48.1	1908.68	0.03	-0.02	49.1	1908.67	0.03	-0.01	50.0
1908.68	0.03	-0.02	50.9	1908.68	0.03	-0.02	51.9	1908.69	0.03	-0.03	52.8
1908.70	0.03	-0.04	53.7	1908.70	0.03	-0.04	54.7	1908.71	0.03	-0.05	55.6
1908.72	0.03	-0.05	56.5	1908.73	0.03	-0.06	57.5	1908.73	0.03	-0.07	58.4
1908.74	0.03	-0.07	59.3	1908.75	0.03	-0.08	60.3	1909.10	0.03	0.26	61.2
1909.74	0.01	0.89	62.1	1909.77	0.00	0.91	63.1	1909.68	0.01	0.80	64.0
1909.71	0.01	0.76	64.8	1909.79	0.00	0.76	65.5	1909.81	0.00	0.71	66.3
1909.82	0.00	0.64	67.8	1909.97	0.00	0.16	68.9	1910.03	0.00	-0.40	69.3
1910.11	0.00	-0.94	69.9	1910.34	0.00	-1.34	70.7	1910.51	0.00	-1.19	71.0
1911.20	0.00	-0.53	71.9	1911.75	0.00	0.00	72.9	1911.78	0.00	0.00	73.8
1911.80	0.00	0.00	74.8	1911.82	0.00	0.00	75.7	1911.85	0.00	0.00	76.7
1911.87	0.00	0.00	77.6	1911.89	0.00	0.00	78.6	1911.92	0.00	0.00	79.5
1911.94	0.00	0.00	80.5	1911.97	0.00	0.00	81.4	1911.99	0.00	0.00	82.4

1912.01 0.00 0.00 83.3 1912.04 0.00 0.00 84.3 1912.06 0.00 0.00 85.2  
 1912.08 0.00 0.00 86.2 1912.11 0.00 0.00 87.1 1912.13 0.00 0.00 88.1  
 1912.16 0.00 0.00 89.0 1912.18 0.00 0.00 90.0

ID  
 2 SECTION 156.00 TIME = 17.01 HRS WS = 1907.06 WIDTH = 18.1

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1910.84 0.00 0.00 10.0 1910.79 0.00 0.00 10.9 1910.74 0.00 0.00 11.9  
 1910.69 0.00 0.00 12.8 1910.64 0.00 0.00 13.8 1910.59 0.00 0.00 14.7  
 1910.54 0.00 0.00 15.7 1910.49 0.00 0.00 16.6 1910.44 0.00 0.00 17.6  
 1910.39 0.00 0.00 18.6 1910.34 0.00 0.00 19.5 1910.29 0.00 0.00 20.5  
 1910.24 0.00 0.00 21.4 1910.19 0.00 0.00 22.4 1910.14 0.00 0.00 23.3  
 1910.09 0.00 0.00 24.3 1910.04 0.00 0.00 25.2 1909.99 0.00 0.00 26.2  
 1909.94 0.00 0.00 27.1 1909.89 0.00 0.00 28.1 1909.84 0.00 0.00 29.0  
 1909.34 0.00 0.00 29.8 1908.84 0.00 0.00 30.6 1908.34 0.00 0.00 31.4  
 1908.04 0.00 0.20 32.4 1907.91 0.00 0.57 33.5 1907.78 0.00 0.54 34.0  
 1907.63 0.00 0.49 34.8 1907.51 0.00 0.47 35.3 1907.30 0.00 0.28 36.4  
 1907.29 0.00 0.27 37.6 1907.27 0.00 0.27 38.5 1907.24 0.00 0.25 39.5  
 1907.04 0.00 0.07 40.5 1906.89 -0.01 -0.08 40.7 1906.26 -0.02 -0.69 41.6  
 1905.58 -0.03 -1.36 42.5 1905.58 -0.03 -1.35 43.4 1905.58 -0.04 -1.34 44.4  
 1905.57 -0.04 -1.33 45.3 1905.57 -0.04 -1.32 46.2 1905.57 -0.04 -1.31 47.2  
 1905.57 -0.04 -1.29 48.1 1905.57 -0.04 -1.28 49.1 1905.57 -0.04 -1.27 50.0  
 1905.57 -0.04 -1.28 50.9 1905.57 -0.04 -1.30 51.9 1905.57 -0.04 -1.31 52.8  
 1905.57 -0.04 -1.32 53.7 1905.57 -0.04 -1.33 54.7 1905.58 -0.04 -1.34 55.6  
 1905.76 0.00 -1.18 56.5 1906.50 0.00 -0.44 57.5 1906.83 -0.03 -0.13 57.9  
 1907.06 0.00 0.09 58.6 1907.09 0.00 0.10 59.5 1907.24 0.00 0.24 60.4  
 1907.27 0.00 0.26 61.5 1907.29 0.00 0.27 62.3 1907.32 0.00 0.28 63.9  
 1907.51 0.00 0.40 64.3 1907.69 0.00 0.51 65.1 1907.81 0.00 0.54 66.0  
 1907.94 0.00 0.60 66.6 1908.04 0.00 0.08 67.6 1908.66 0.00 0.07 68.5  
 1909.20 0.00 -0.01 69.2 1909.75 0.00 -0.09 70.0 1909.89 0.00 0.00 71.0  
 1909.94 0.00 0.00 71.9 1909.98 0.00 0.00 72.9 1910.03 0.00 0.00 73.8  
 1910.08 0.00 0.00 74.8 1910.13 0.00 0.00 75.7 1910.17 0.00 0.00 76.7  
 1910.22 0.00 0.00 77.6 1910.27 0.00 0.00 78.6 1910.32 0.00 0.00 79.5  
 1910.36 0.00 0.00 80.5 1910.41 0.00 0.00 81.4 1910.46 0.00 0.00 82.4  
 1910.51 0.00 0.00 83.3 1910.55 0.00 0.00 84.3 1910.60 0.00 0.00 85.2  
 1910.65 0.00 0.00 86.2 1910.70 0.00 0.00 87.1 1910.74 0.00 0.00 88.1  
 1910.79 0.00 0.00 89.0 1910.84 0.00 0.00 90.0

1

TIME = 19.87 HRS DT = 120 SECS TIME STEP = 600

SECTION	W.S.ELEV.	WIDTH	DEPTH	Q	V	SLOPE	D50	QS/Q	FR	SED.	YIELD
	FT	FT	FT	CFS	FPS	MM	1000 PPM		TONS		

155.000	1906.90	37.9	1.90	121	1.92	0.000792	0.48	0.90	0.26	0.429E+03
156.000	1907.00	17.0	1.53	121	5.53	0.009579	0.61	17.24	0.86	0.483E+04
157.000	1909.71	33.4	1.18	121	4.47	0.010842	0.56	9.47	0.87	0.483E+04
158.000	1911.09	37.4	0.87	121	4.50	0.012774	0.66	14.48	0.93	0.482E+04
159.000	1912.51	41.0	0.86	121	4.06	0.010320	0.66	8.92	0.84	0.474E+04
160.000	1915.61	45.9	0.87	121	4.13	0.012659	0.45	7.30	0.91	0.456E+04
161.000	1917.71	48.0	0.92	121	3.75	0.009760	0.64	20.23	0.81	0.467E+04
162.000	1918.80	43.1	0.78	121	4.41	0.014428	0.64	20.97	0.97	0.475E+04
163.000	1920.80	41.3	0.89	121	4.35	0.013046	0.56	6.87	0.93	0.471E+04
164.000	1922.06	43.7	0.79	121	4.30	0.013503	0.58	20.94	0.94	0.470E+04
165.000	1923.19	40.9	0.85	121	3.80	0.008278	0.56	4.02	0.76	0.456E+04
166.000	1924.19	38.5	0.90	121	4.31	0.011582	0.42	10.41	0.89	0.429E+04
167.000	1929.29	77.7	1.20	121	3.51	0.014729	0.54	18.50	0.93	0.397E+04
168.000	1930.44	42.7	0.96	121	3.64	0.007569	0.52	1.23	0.73	0.435E+04
169.000	1932.54	72.4	1.04	121	3.61	0.014775	0.65	12.35	0.93	0.455E+04
170.000	1933.59	40.1	0.93	121	3.80	0.008050	0.53	7.14	0.75	0.477E+04
171.000	1935.94	55.7	0.89	121	3.49	0.009326	0.37	5.54	0.78	0.484E+04

172.000	1938.73	24.5	1.05	121	5.09	0.011284	0.39	14.75	0.91	0.499E+04
173.000	1940.26	42.7	1.02	121	4.17	0.011863	0.40	22.27	0.89	0.558E+04
174.000	1941.27	68.7	1.27	121	2.75	0.005604	0.52	6.46	0.61	0.595E+04

ID  
19 SECTION 173.00 TIME = 19.87 HRS WS =1940.26 WIDTH = 42.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1940.66	0.00	0.00	10.0	1940.41	0.00	0.96	10.9	1940.41	0.00	0.97	11.9
1940.41	0.00	0.98	12.8	1940.40	0.00	0.98	13.8	1940.40	0.00	0.99	14.7
1940.40	0.00	1.00	15.7	1940.39	0.00	1.00	16.6	1940.39	0.00	1.01	17.6
1940.38	0.00	1.01	18.6	1940.37	0.00	1.01	19.5	1940.36	0.00	1.01	20.5
1940.36	0.00	1.02	21.4	1940.35	0.00	1.03	22.4	1940.35	0.00	1.03	23.3
1940.34	0.00	1.03	24.3	1940.33	0.00	1.03	25.2	1940.32	0.00	1.03	26.2
1940.30	0.00	1.02	27.1	1940.27	0.00	1.00	28.1	1940.25	0.00	0.99	29.0
1940.19	0.00	1.05	29.8	1940.17	0.00	1.15	30.6	1940.16	0.00	1.26	31.4
1940.16	0.00	1.38	32.2	1940.14	0.00	1.48	33.0	1940.07	-0.01	1.44	33.9
1939.93	-0.01	1.32	34.8	1939.69	-0.02	1.11	35.8	1939.46	-0.03	0.90	36.7
1939.41	-0.03	0.87	37.6	1939.36	-0.04	0.85	38.5	1939.30	-0.04	0.82	39.4
1939.26	-0.04	0.79	40.3	1939.22	-0.05	0.79	41.3	1939.21	-0.05	0.80	42.2
1939.21	-0.05	0.82	43.1	1939.20	-0.05	0.84	44.0	1939.20	-0.05	0.87	44.9
1939.20	-0.05	0.89	45.7	1939.19	-0.05	0.92	46.6	1939.19	-0.06	0.95	47.4
1939.19	-0.06	0.97	48.3	1939.19	-0.06	1.00	49.1	1939.18	-0.06	1.02	50.0
1939.19	-0.06	0.99	50.8	1939.19	-0.06	0.96	51.7	1939.19	-0.06	0.93	52.5
1939.19	-0.05	0.90	53.3	1939.20	-0.05	0.87	54.2	1939.20	-0.05	0.84	55.0
1939.20	-0.05	0.82	55.9	1939.21	-0.05	0.80	56.8	1939.21	-0.05	0.78	57.8
1939.22	-0.05	0.77	58.7	1939.25	-0.04	0.78	59.6	1939.30	-0.04	0.80	60.5
1939.35	-0.04	0.83	61.5	1939.41	-0.03	0.86	62.4	1939.46	-0.03	0.89	63.3
1939.71	-0.02	1.12	64.2	1939.94	-0.01	1.32	65.2	1940.08	-0.01	1.44	66.1
1940.14	0.00	1.48	67.0	1940.16	0.00	1.35	67.8	1940.16	0.00	1.20	68.5
1940.18	0.00	1.07	69.2	1940.22	0.00	0.96	70.0	1940.25	0.00	0.98	70.9
1940.27	0.00	0.99	71.8	1940.30	0.00	1.02	72.7	1940.32	0.00	1.02	73.6
1940.33	0.00	1.02	74.5	1940.34	0.00	1.03	75.5	1940.35	0.00	1.02	76.4
1940.35	0.00	1.02	77.3	1940.36	0.00	1.02	78.2	1940.42	0.00	1.07	79.1
1940.66	0.00	0.00	80.0								

ID  
18 SECTION 172.00 TIME = 19.87 HRS WS =1938.73 WIDTH = 24.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1939.61	0.00	0.00	10.0	1939.33	0.00	1.82	10.9	1939.32	0.00	1.82	12.3
1939.31	0.00	1.83	13.0	1939.22	0.00	1.74	13.8	1939.21	0.00	1.74	14.7
1939.09	0.00	1.63	15.9	1939.08	0.00	1.63	16.7	1939.06	0.00	1.62	17.6
1939.05	0.00	1.62	18.6	1939.05	0.00	1.63	19.5	1939.05	0.00	1.64	20.5
1939.03	0.00	1.63	21.4	1939.10	0.00	1.71	22.4	1939.08	0.00	1.70	23.3
1939.09	0.00	1.72	24.3	1939.08	0.00	1.72	25.2	1939.08	0.00	1.73	26.2
1939.08	0.00	1.75	27.1	1939.06	0.00	1.73	28.1	1939.05	0.00	1.73	29.0
1939.06	0.00	1.84	29.8	1939.06	0.00	1.94	30.6	1939.06	0.00	2.04	31.4
1939.06	0.00	2.14	32.2	1939.04	0.00	2.22	33.0	1939.03	0.00	2.23	33.9
1939.03	0.00	2.27	34.8	1939.04	0.00	2.30	35.7	1939.04	0.00	2.33	36.6
1938.74	0.00	2.06	37.6	1938.19	0.08	1.53	38.5	1937.71	0.00	1.08	39.4
1937.70	0.00	1.10	40.3	1937.70	0.01	1.13	41.2	1937.70	0.01	1.16	42.1
1937.70	0.01	1.18	43.0	1937.70	0.02	1.21	43.9	1937.70	0.02	1.23	44.8
1937.70	0.02	1.26	45.6	1937.70	0.02	1.29	46.5	1937.70	0.02	1.31	47.4
1937.70	0.02	1.33	48.2	1937.70	0.02	1.36	49.1	1937.70	0.02	1.38	50.0
1937.70	0.02	1.35	50.8	1937.70	0.02	1.32	51.7	1937.70	0.02	1.29	52.5
1937.70	0.02	1.25	53.3	1937.70	0.02	1.22	54.2	1937.70	0.02	1.18	55.0
1937.70	0.02	1.16	55.9	1937.70	0.01	1.14	56.8	1937.70	0.01	1.11	57.8
1937.70	0.01	1.09	58.7	1937.70	0.01	1.07	59.6	1937.73	0.02	1.07	60.5
1938.36	0.06	1.67	61.4	1938.87	0.00	2.16	62.3	1938.96	0.00	2.23	63.3

1938.99	0.00	2.24	64.2	1939.04	0.00	2.27	65.2	1939.04	0.00	2.24	66.1
1939.03	0.00	2.21	67.0	1939.03	0.00	2.09	67.8	1939.02	0.00	1.95	68.5
1939.04	0.00	1.85	69.2	1939.06	0.00	1.74	70.0	1939.08	0.00	1.74	70.9
1939.07	0.00	1.71	71.8	1939.08	0.00	1.71	72.7	1939.08	0.00	1.69	73.6
1939.08	0.00	1.68	74.5	1939.06	0.00	1.63	75.4	1939.14	0.00	1.70	76.3
1939.22	0.00	1.76	77.1	1939.32	0.00	1.84	77.8	1939.33	0.00	1.82	79.0
1939.61	0.00	0.00	80.0								

ID  
17 SECTION 171.00 TIME = 19.87 HRS WS =1935.94 WIDTH = 55.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1936.46	0.00	0.00	10.0	1936.19	0.00	0.44	10.9	1936.13	0.00	0.39	11.9
1936.04	0.00	0.32	12.8	1936.03	0.00	0.32	13.8	1936.03	0.00	0.34	14.7
1936.03	0.00	0.35	15.7	1936.02	0.00	0.36	16.6	1936.02	0.00	0.37	17.6
1936.02	0.00	0.39	18.6	1936.02	0.00	0.40	19.5	1936.04	0.00	0.43	20.5
1935.90	-0.04	0.31	21.4	1935.66	0.01	0.09	22.1	1935.49	0.01	-0.07	22.8
1935.50	0.01	-0.05	23.7	1935.48	0.01	-0.05	24.6	1935.48	0.01	-0.03	25.5
1935.50	0.01	0.00	26.3	1935.49	0.01	0.01	27.4	1935.49	0.01	0.02	28.4
1935.49	0.01	0.11	29.2	1935.49	0.01	0.21	29.8	1935.49	0.01	0.32	31.4
1935.48	0.01	0.41	32.2	1935.50	0.01	0.53	33.0	1935.48	0.01	0.54	33.9
1935.43	0.02	0.52	34.8	1935.38	0.02	0.50	35.7	1935.34	0.02	0.49	36.6
1935.29	0.02	0.47	37.5	1935.23	0.02	0.44	38.4	1935.17	0.02	0.41	39.3
1935.11	0.02	0.38	40.2	1935.08	0.02	0.38	41.1	1935.08	0.02	0.40	42.0
1935.07	0.02	0.43	42.9	1935.07	0.02	0.45	43.8	1935.07	0.02	0.47	44.7
1935.07	0.02	0.49	45.6	1935.07	0.02	0.51	46.4	1935.07	0.02	0.53	47.3
1935.07	0.02	0.56	48.2	1935.07	0.02	0.58	49.1	1935.07	0.02	0.60	50.0
1935.07	0.02	0.57	50.8	1935.07	0.02	0.53	51.7	1935.07	0.02	0.50	52.5
1935.07	0.02	0.47	53.3	1935.07	0.02	0.44	54.2	1935.07	0.02	0.40	55.0
1935.07	0.02	0.38	55.9	1935.07	0.02	0.36	56.8	1935.08	0.02	0.33	57.8
1935.08	0.02	0.32	58.7	1935.10	0.02	0.31	59.6	1935.16	0.02	0.35	60.5
1935.23	0.02	0.39	61.5	1935.28	0.02	0.43	62.4	1935.33	0.02	0.45	63.3
1935.38	0.02	0.48	64.2	1935.42	0.02	0.50	65.2	1935.62	0.01	0.67	66.1
1935.60	0.01	0.64	67.0	1935.60	0.01	0.51	67.8	1935.62	0.01	0.40	69.3
1935.61	0.01	0.26	69.8	1935.61	0.01	0.14	70.7	1935.61	0.01	0.12	71.7
1935.61	0.01	0.09	72.6	1935.62	0.01	0.07	73.6	1935.61	0.01	0.04	74.3
1935.61	0.01	0.02	75.2	1935.63	0.01	0.01	76.1	1935.68	-0.03	0.04	76.7
1936.13	0.00	0.46	77.5	1936.14	0.00	0.45	78.4	1936.15	0.00	0.43	79.4
1936.15	0.00	0.40	80.3	1936.16	0.00	0.39	81.2	1936.19	0.00	0.39	82.2
1936.19	0.00	0.37	83.0	1936.21	0.00	0.36	83.9	1936.46	0.00	0.00	85.0

ID  
16 SECTION 170.00 TIME = 19.87 HRS WS =1933.59 WIDTH = 40.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1934.70	0.00	0.00	10.0	1934.37	0.00	0.36	10.8	1934.32	0.00	0.32	12.0
1934.23	0.00	0.27	12.9	1934.24	0.00	0.29	13.8	1934.24	0.00	0.31	14.6
1934.23	0.00	0.32	15.7	1934.24	0.00	0.35	16.6	1934.23	0.00	0.36	17.6
1934.23	0.00	0.38	18.6	1934.23	0.00	0.40	19.4	1934.23	0.00	0.42	20.2
1934.23	0.00	0.44	20.9	1934.23	0.00	0.46	21.7	1934.24	0.00	0.49	22.9
1934.24	0.00	0.51	23.9	1934.23	0.00	0.52	25.2	1934.24	0.00	0.55	26.2
1934.23	0.00	0.56	27.1	1933.82	-0.02	0.18	28.0	1933.36	-0.01	-0.27	28.6
1933.20	0.00	-0.33	29.2	1933.20	0.00	-0.23	30.6	1933.19	0.00	-0.14	31.0
1933.21	0.00	-0.02	32.3	1933.19	0.00	0.06	33.0	1932.99	0.00	-0.10	33.7
1932.93	0.00	-0.13	34.8	1932.75	0.00	-0.28	35.7	1932.67	0.00	-0.33	36.6
1932.67	0.00	-0.30	37.4	1932.67	0.00	-0.26	38.3	1932.67	0.00	-0.23	39.2
1932.67	0.00	-0.20	40.1	1932.67	0.00	-0.16	41.0	1932.67	0.00	-0.14	41.9
1932.67	0.00	-0.12	42.8	1932.67	0.00	-0.10	43.7	1932.67	0.00	-0.08	44.6
1932.67	0.00	-0.06	45.5	1932.67	0.00	-0.04	46.4	1932.67	0.00	-0.02	47.3
1932.67	0.00	0.00	48.2	1932.67	0.00	0.02	49.1	1932.67	0.00	0.04	50.0

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1932.67	0.00	0.01	50.9	1932.67	0.00	-0.02	51.7	1932.67	0.00	-0.05	52.6	
1932.67	0.00	-0.08	53.4	1932.67	0.00	-0.11	54.3	1932.67	0.00	-0.13	55.1	
1932.67	0.00	-0.16	56.0	1932.67	0.00	-0.19	56.9	1932.67	0.00	-0.21	57.8	
1932.67	0.00	-0.24	58.8	1932.67	0.00	-0.26	59.7	1932.67	0.00	-0.29	60.6	
1932.67	0.00	-0.31	61.5	1932.67	0.00	-0.34	62.4	1932.67	0.00	-0.36	63.3	
1932.73	0.00	-0.32	64.3	1932.92	0.00	-0.16	65.2	1933.06	0.00	-0.04	66.1	
1933.20	0.00	0.07	67.6	1933.50	0.00	0.17	68.3	1933.65	-0.01	0.12	68.5	
1934.31	0.00	0.58	69.6	1934.32	0.00	0.39	70.4	1934.33	0.00	0.41	71.6	
1934.34	0.00	0.42	72.4	1934.34	0.00	0.42	73.1	1934.35	0.00	0.44	74.1	
1934.34	0.00	0.43	74.8	1934.34	0.00	0.44	75.7	1934.34	0.00	0.45	76.7	
1934.34	0.00	0.45	77.6	1934.34	0.00	0.46	78.6	1934.34	0.00	0.46	79.5	
1934.35	0.00	0.47	80.5	1934.36	0.00	0.49	81.5	1934.36	0.00	0.50	82.4	
1934.36	0.00	0.50	83.3	1934.36	0.00	0.51	84.3	1934.37	0.00	0.52	85.2	
1934.39	0.00	0.54	86.1	1934.40	0.00	0.56	87.0	1934.42	0.00	0.58	88.0	
1934.42	0.00	0.59	88.9	1934.70	0.00	0.00	90.0					

ID  
 15 SECTION 169.00 TIME = 19.87 HRS WS =1932.54 WIDTH = 72.4

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1932.84	0.00	0.00	10.0	1932.51	0.01	0.25	10.9	1932.37	0.00	0.13	11.4	
1932.37	0.00	0.15	12.9	1932.36	0.00	0.17	13.8	1932.36	0.00	0.20	14.9	
1932.36	0.00	0.22	15.7	1932.35	0.00	0.24	16.5	1932.36	0.00	0.27	17.3	
1932.35	0.00	0.29	18.6	1932.35	0.00	0.31	19.3	1932.35	0.00	0.33	20.1	
1932.34	0.00	0.35	21.3	1932.34	0.00	0.37	22.4	1932.34	0.00	0.40	23.1	
1932.34	0.00	0.42	23.9	1932.33	0.00	0.44	24.9	1932.33	0.00	0.46	26.2	
1932.32	0.00	0.48	27.1	1932.32	0.00	0.51	28.1	1932.31	0.00	0.52	29.0	
1932.31	0.00	0.63	29.8	1932.31	0.00	0.72	30.6	1932.31	0.00	0.82	31.3	
1932.31	0.00	0.92	32.2	1932.15	0.00	0.86	32.8	1932.21	0.00	0.96	33.9	
1932.15	0.00	0.93	34.8	1932.08	-0.01	0.89	35.7	1931.99	-0.01	0.83	36.6	
1931.88	-0.01	0.76	37.4	1931.76	-0.01	0.67	38.3	1931.66	-0.01	0.60	39.2	
1931.64	-0.01	0.62	40.1	1931.63	-0.01	0.64	41.0	1931.61	-0.01	0.64	41.9	
1931.60	-0.01	0.65	42.8	1931.58	-0.01	0.65	43.7	1931.57	-0.02	0.66	44.6	
1931.56	-0.02	0.67	45.5	1931.54	-0.02	0.67	46.4	1931.53	-0.02	0.68	47.3	
1931.51	-0.02	0.68	48.2	1931.50	-0.02	0.69	49.1	1931.48	-0.02	0.69	50.0	
1931.50	-0.02	0.68	50.9	1931.51	-0.02	0.67	51.7	1931.53	-0.02	0.65	52.6	
1931.54	-0.02	0.64	53.4	1931.55	-0.02	0.62	54.3	1931.57	-0.02	0.60	55.1	
1931.58	-0.01	0.59	56.0	1931.60	-0.01	0.58	56.9	1931.61	-0.01	0.57	57.8	
1931.62	-0.01	0.56	58.8	1931.64	-0.01	0.55	59.7	1931.65	-0.01	0.54	60.6	
1931.74	-0.01	0.60	61.5	1931.86	-0.01	0.70	62.4	1931.97	-0.01	0.79	63.3	
1932.07	-0.01	0.85	64.3	1932.15	-0.01	0.91	65.2	1932.21	0.00	0.95	66.1	
1932.30	0.00	1.01	67.0	1932.30	0.00	0.81	67.8	1932.30	0.00	0.61	68.5	
1932.31	0.00	0.42	69.5	1932.31	0.00	0.22	70.3	1932.32	0.00	0.22	71.3	
1932.37	0.00	0.26	71.9	1932.37	0.00	0.25	73.3	1932.36	0.00	0.23	74.3	
1932.46	0.00	0.32	74.8	1932.53	0.00	0.38	75.7	1932.53	0.00	0.37	76.7	
1932.53	0.00	0.37	77.6	1932.53	0.00	0.36	78.6	1932.53	0.00	0.35	79.5	
1932.53	0.00	0.34	80.5	1932.54	0.00	0.33	81.5	1932.54	0.01	0.33	82.4	
1932.55	0.00	0.32	83.3	1932.55	0.00	0.32	84.3	1932.56	0.00	0.31	85.2	
1932.56	0.00	0.31	86.2	1932.57	0.00	0.31	87.1	1932.60	0.00	0.33	88.0	
1932.62	0.00	0.34	88.9	1932.84	0.00	0.00	90.0					

ID  
 14 SECTION 168.00 TIME = 19.87 HRS WS =1930.44 WIDTH = 42.7

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1931.23	0.00	0.00	10.0	1930.93	0.00	0.50	10.8	1930.85	0.00	0.45	12.0	
1930.74	0.00	0.36	12.8	1930.76	0.00	0.41	13.8	1930.74	0.00	0.41	14.7	
1930.73	0.00	0.43	15.7	1930.73	0.00	0.45	16.6	1930.73	0.00	0.48	17.3	
1930.75	0.00	0.53	18.2	1930.74	0.00	0.54	19.1	1930.74	0.00	0.56	20.4	
1930.75	0.00	0.60	21.4	1930.73	0.00	0.61	22.4	1930.73	0.00	0.63	23.3	

1930.72	0.00	0.65	24.3	1930.74	0.00	0.69	25.2	1930.73	0.00	0.71	26.2
1930.74	0.00	0.74	27.1	1930.72	0.00	0.75	28.1	1930.19	-0.01	0.24	28.9
1930.17	0.02	0.32	29.3	1930.14	0.02	0.39	30.2	1930.12	0.02	0.46	31.0
1930.10	0.02	0.55	31.9	1929.89	0.02	0.44	32.7	1929.74	0.02	0.33	33.9
1929.68	0.02	0.31	34.8	1929.69	0.02	0.35	35.6	1929.58	0.03	0.28	36.5
1929.58	0.03	0.31	37.4	1929.57	0.03	0.35	38.2	1929.57	0.03	0.38	39.1
1929.56	0.03	0.41	40.0	1929.55	0.03	0.42	40.9	1929.55	0.03	0.43	41.8
1929.54	0.03	0.44	42.7	1929.53	0.03	0.46	43.6	1929.53	0.03	0.47	44.5
1929.52	0.03	0.48	45.5	1929.52	0.03	0.49	46.4	1929.51	0.03	0.51	47.3
1929.51	0.03	0.52	48.2	1929.51	0.03	0.54	49.1	1929.51	0.03	0.56	50.0
1929.51	0.03	0.53	50.9	1929.51	0.03	0.50	51.7	1929.51	0.03	0.48	52.6
1929.52	0.03	0.45	53.4	1929.52	0.03	0.43	54.3	1929.53	0.03	0.40	55.1
1929.53	0.03	0.38	56.0	1929.54	0.03	0.36	56.9	1929.54	0.03	0.34	57.8
1929.55	0.03	0.33	58.8	1929.56	0.03	0.31	59.7	1929.56	0.03	0.29	60.6
1929.57	0.03	0.27	61.5	1929.58	0.03	0.25	62.4	1929.58	0.03	0.23	63.3
1929.67	0.02	0.29	64.3	1929.74	0.02	0.34	65.2	1929.78	0.02	0.35	66.1
1929.97	0.02	0.52	67.3	1930.10	0.02	0.45	68.1	1930.13	0.02	0.28	69.0
1930.16	0.02	0.11	70.0	1930.24	0.00	-0.01	70.9	1930.48	-0.01	0.22	71.2
1930.91	0.00	0.64	72.0	1930.90	0.00	0.62	72.9	1930.90	0.00	0.62	73.9
1930.91	0.00	0.61	74.8	1930.91	0.00	0.60	75.8	1930.91	0.00	0.60	76.7
1930.91	0.00	0.58	77.6	1930.92	0.00	0.59	78.6	1930.91	0.00	0.56	79.5
1930.91	0.00	0.55	80.5	1930.92	0.00	0.56	81.4	1930.92	0.00	0.55	82.4
1930.91	0.00	0.53	83.3	1930.91	0.00	0.52	84.3	1930.92	0.00	0.52	85.2
1930.94	0.00	0.53	86.1	1930.97	0.00	0.54	87.0	1930.98	0.00	0.55	88.0
1930.99	0.00	0.55	88.8	1931.23	0.00	0.00	90.0				

ID  
13 SECTION 167.00 TIME = 19.87 HRS WS=1929.29 WIDTH = 77.7

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1929.55	0.00	0.00	10.0	1929.10	0.00	0.52	10.7	1928.99	-0.01	0.43	11.9
1928.98	-0.01	0.45	12.5	1928.94	-0.01	0.43	13.5	1928.93	-0.01	0.45	14.8
1928.98	-0.01	0.52	15.7	1928.95	-0.01	0.51	16.7	1928.94	-0.01	0.53	17.6
1928.92	-0.01	0.54	18.5	1928.92	-0.01	0.56	19.4	1928.96	-0.01	0.63	20.3
1928.91	-0.01	0.60	21.4	1928.95	-0.01	0.67	22.4	1928.95	-0.01	0.69	23.3
1928.91	-0.01	0.68	24.3	1928.91	-0.01	0.71	25.2	1928.90	-0.01	0.72	26.2
1928.89	-0.01	0.73	27.1	1928.88	-0.01	0.75	28.1	1928.93	-0.01	0.82	29.0
1928.92	-0.01	0.92	29.8	1928.92	-0.01	1.01	30.6	1928.91	-0.01	1.10	31.4
1928.90	-0.01	1.19	32.2	1928.90	-0.02	1.29	33.0	1928.89	-0.02	1.32	33.9
1928.88	-0.02	1.36	34.7	1928.91	-0.02	1.42	35.6	1928.87	-0.02	1.43	36.4
1928.88	-0.02	1.48	37.3	1928.85	-0.02	1.50	38.1	1928.79	-0.02	1.48	39.0
1928.70	-0.03	1.41	39.9	1928.60	-0.03	1.32	40.8	1928.49	-0.04	1.23	41.8
1928.36	-0.04	1.12	42.7	1928.27	-0.05	1.04	43.6	1928.20	-0.05	0.99	44.5
1928.17	-0.05	0.97	45.4	1928.14	-0.06	0.97	46.3	1928.11	-0.06	0.95	47.3
1928.08	-0.06	0.94	48.2	1928.05	-0.06	0.92	49.1	1928.02	-0.06	0.91	50.0
1928.05	-0.06	0.92	50.9	1928.08	-0.06	0.93	51.8	1928.11	-0.06	0.93	52.7
1928.14	-0.06	0.94	53.6	1928.16	-0.05	0.94	54.4	1928.19	-0.05	0.95	55.3
1928.25	-0.05	0.98	56.2	1928.34	-0.04	1.05	57.1	1928.45	-0.04	1.14	58.0
1928.57	-0.03	1.23	58.9	1928.67	-0.03	1.30	59.8	1928.76	-0.02	1.36	60.7
1928.84	-0.02	1.41	61.6	1928.90	-0.02	1.44	62.5	1928.96	-0.01	1.47	63.4
1929.01	-0.01	1.49	64.3	1929.06	-0.01	1.51	65.2	1929.09	-0.01	1.51	66.1
1929.15	-0.01	1.54	67.0	1929.18	0.00	1.37	67.8	1929.18	0.00	1.17	68.5
1929.18	0.00	0.97	69.4	1929.18	0.00	0.77	70.0	1929.19	0.00	0.77	71.0
1929.19	0.00	0.76	71.9	1929.19	0.00	0.75	72.9	1929.19	0.00	0.75	73.8
1929.17	0.00	0.71	74.8	1929.17	0.00	0.70	75.7	1929.17	0.00	0.70	76.7
1929.18	0.00	0.69	77.6	1929.18	0.00	0.69	78.6	1929.19	0.00	0.68	79.9
1929.19	0.00	0.67	80.5	1929.19	0.00	0.67	81.5	1929.20	0.00	0.66	82.4
1929.20	0.00	0.65	83.3	1929.18	0.00	0.63	84.7	1929.18	0.00	0.62	85.2
1929.21	0.00	0.64	86.2	1929.20	0.00	0.62	87.1	1929.29	0.00	0.70	88.1
1929.32	0.00	0.72	88.8	1929.55	0.00	0.00	90.0				

## ID

12 SECTION 166.00 TIME = 19.87 HRS WS =1924.19 WIDTH = 38.5

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1927.53	0.00	0.00	10.0	1927.22	0.00	0.01	10.9	1927.20	0.00	0.04	11.9
1927.15	0.00	0.04	12.9	1927.12	0.00	0.06	13.8	1927.11	0.00	0.10	14.7
1927.12	0.00	0.16	15.7	1927.13	0.00	0.22	16.7	1927.11	0.00	0.25	17.6
1927.09	0.00	0.28	18.6	1927.08	0.00	0.32	19.5	1927.07	0.00	0.36	20.5
1927.04	0.00	0.38	21.3	1927.04	0.00	0.43	22.3	1927.04	0.00	0.48	23.3
1927.04	0.00	0.53	24.3	1927.04	0.00	0.58	25.2	1927.01	0.00	0.60	26.2
1926.63	0.00	0.27	27.1	1925.94	0.00	-0.37	28.1	1925.24	0.00	-1.02	29.0
1924.65	0.00	-1.51	29.8	1924.37	-0.01	-1.69	30.1	1924.19	0.02	-1.77	30.3
1924.06	0.01	-1.80	30.5	1923.62	0.02	-2.14	33.0	1923.60	0.02	-2.11	33.9
1923.59	0.02	-2.09	34.7	1923.57	0.02	-2.06	35.6	1923.55	0.02	-2.03	36.4
1923.54	0.02	-2.01	37.3	1923.52	0.02	-1.98	38.1	1923.50	0.02	-1.96	39.0
1923.48	0.02	-1.96	39.9	1923.46	0.02	-1.96	40.8	1923.45	0.02	-1.96	41.8
1923.44	0.02	-1.95	42.7	1923.43	0.02	-1.95	43.6	1923.42	0.02	-1.95	44.5
1923.41	0.02	-1.94	45.4	1923.40	0.02	-1.93	46.3	1923.39	0.02	-1.92	47.3
1923.38	0.02	-1.92	48.2	1923.37	0.02	-1.91	49.1	1923.31	0.02	-1.95	50.0
1923.32	0.02	-1.96	50.9	1923.33	0.02	-1.97	51.8	1923.34	0.02	-1.98	52.7
1923.35	0.02	-1.99	53.6	1923.36	0.02	-2.00	54.5	1923.37	0.02	-2.01	55.4
1923.38	0.02	-2.02	56.3	1923.39	0.02	-2.03	57.2	1923.41	0.02	-2.03	58.1
1923.42	0.02	-2.04	59.0	1923.43	0.02	-2.07	59.9	1923.44	0.02	-2.09	60.8
1923.45	0.02	-2.11	61.7	1923.46	0.02	-2.13	62.6	1923.42	0.02	-2.21	63.4
1923.43	0.02	-2.23	64.3	1923.44	0.02	-2.25	65.2	1923.45	0.02	-2.27	66.1
1923.55	0.02	-2.21	67.9	1924.19	0.01	-1.69	68.9	1924.38	0.00	-1.63	69.1
1924.54	0.00	-1.60	69.2	1925.09	0.00	-1.17	70.0	1925.78	0.00	-0.50	71.0
1926.47	0.00	0.16	71.9	1926.97	0.00	0.64	72.9	1926.99	0.00	0.63	73.8
1927.00	0.00	0.62	74.8	1927.02	0.00	0.62	75.7	1927.03	0.00	0.61	76.7
1927.05	0.00	0.60	77.6	1927.03	0.00	0.56	78.6	1927.05	0.00	0.55	79.5
1927.04	0.00	0.52	80.5	1927.05	0.00	0.50	81.4	1927.08	0.00	0.51	82.4
1927.08	0.00	0.49	83.3	1927.10	0.00	0.49	84.3	1927.11	0.00	0.47	85.3
1927.14	0.00	0.47	86.2	1927.15	0.00	0.46	87.1	1927.17	0.00	0.46	88.0
1927.26	0.00	0.52	88.9	1927.53	0.00	0.00	90.0				

## ID

11 SECTION 165.00 TIME = 19.87 HRS WS =1923.19 WIDTH = 40.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1925.42	0.00	0.00	10.0	1925.40	0.00	0.00	10.9	1925.37	0.00	0.00	11.9
1925.34	0.00	0.00	12.8	1925.32	0.00	0.00	13.8	1925.29	0.00	0.00	14.7
1925.27	0.00	0.00	15.7	1925.24	0.00	0.00	16.6	1925.22	0.00	0.00	17.6
1925.19	0.00	0.00	18.6	1925.17	0.00	0.00	19.5	1925.14	0.00	0.00	20.5
1925.12	0.00	0.00	21.4	1925.09	0.00	0.00	22.4	1925.07	0.00	0.00	23.3
1925.04	0.00	0.00	24.3	1925.02	0.00	0.00	25.2	1924.99	0.00	0.00	26.2
1924.56	0.00	-0.41	27.1	1923.97	0.00	-0.98	27.9	1923.82	-0.02	-1.10	28.1
1923.12	-0.01	-1.60	29.1	1923.05	0.00	-1.47	29.4	1922.37	0.00	-1.95	30.5
1922.37	0.00	-1.75	31.8	1922.37	0.01	-1.56	33.0	1922.37	0.01	-1.50	33.8
1922.37	0.01	-1.45	34.7	1922.37	0.01	-1.40	35.5	1922.37	0.01	-1.35	36.3
1922.37	0.01	-1.30	37.2	1922.37	0.02	-1.25	38.0	1922.37	0.02	-1.24	38.9
1922.37	0.02	-1.22	39.8	1922.37	0.02	-1.21	40.8	1922.37	0.02	-1.19	41.7
1922.37	0.02	-1.18	42.6	1922.37	0.02	-1.16	43.5	1922.37	0.02	-1.15	44.5
1922.37	0.02	-1.13	45.4	1922.37	0.02	-1.12	46.3	1922.37	0.02	-1.10	47.2
1922.37	0.03	-1.08	48.2	1922.37	0.03	-1.07	49.1	1922.37	0.03	-1.05	50.0
1922.37	0.03	-1.07	50.9	1922.37	0.03	-1.09	51.8	1922.37	0.02	-1.11	52.7
1922.37	0.02	-1.13	53.6	1922.37	0.02	-1.16	54.5	1922.37	0.02	-1.17	55.4
1922.37	0.02	-1.20	56.3	1922.37	0.02	-1.21	57.2	1922.37	0.01	-1.23	58.1
1922.37	0.00	-1.25	59.0	1922.37	0.00	-1.28	59.9	1922.38	0.00	-1.31	60.8
1922.39	0.00	-1.33	61.7	1922.39	0.00	-1.36	62.6	1922.40	0.00	-1.38	63.4
1922.41	0.00	-1.41	64.3	1922.42	0.00	-1.44	65.2	1922.42	0.00	-1.46	66.1

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1922.43	0.00	-1.49	67.0	1922.81	0.00	-1.24	68.0	1922.90	0.00	-1.27	69.0	
1923.06	-0.01	-1.24	69.8	1923.20	-0.01	-1.22	70.0	1923.76	0.00	-0.69	71.4	
1923.75	0.00	-0.71	72.5	1923.76	0.00	-0.73	73.5	1923.77	0.00	-0.74	74.4	
1923.77	0.00	-0.77	75.1	1923.86	0.00	-0.70	76.4	1924.00	0.00	-0.59	76.7	
1924.52	0.00	-0.09	77.7	1924.59	0.00	-0.04	78.6	1924.66	0.00	0.00	79.5	
1924.68	0.00	0.00	80.5	1924.71	0.00	0.00	81.4	1924.73	0.00	0.00	82.4	
1924.75	0.00	0.00	83.3	1924.78	0.00	0.00	84.3	1924.80	0.00	0.00	85.2	
1924.82	0.00	0.00	86.2	1924.85	0.00	0.00	87.1	1924.87	0.00	0.00	88.1	
1924.90	0.00	0.00	89.0	1924.95	0.00	0.00	90.0					

ID  
10 SECTION 164.00 TIME = 19.87 HRS WS =1922.06 WIDTH = 43.7

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1924.08	0.00	0.00	10.0	1924.06	0.00	0.00	10.9	1924.05	0.00	0.00	11.9	
1924.03	0.00	0.00	12.8	1924.02	0.00	0.00	13.8	1924.00	0.00	0.00	14.7	
1923.99	0.00	0.00	15.7	1923.97	0.00	0.00	16.6	1923.96	0.00	0.00	17.6	
1923.94	0.00	0.00	18.6	1923.93	0.00	0.00	19.5	1923.91	0.00	0.00	20.5	
1923.90	0.00	0.00	21.4	1923.88	0.00	0.00	22.4	1923.87	0.00	0.00	23.3	
1923.85	0.00	0.00	24.3	1923.84	0.00	0.00	25.2	1923.52	0.00	-0.30	26.2	
1922.82	-0.01	-0.99	27.1	1922.15	0.02	-1.65	28.0	1922.00	0.01	-1.79	28.2	
1921.92	0.00	-1.52	29.2	1921.85	-0.01	-1.25	29.7	1921.64	-0.01	-1.12	30.4	
1921.43	-0.02	-0.99	32.2	1921.41	-0.03	-0.67	33.0	1921.39	-0.03	-0.64	33.8	
1921.38	-0.03	-0.60	34.7	1921.37	-0.03	-0.56	35.5	1921.35	-0.03	-0.53	36.3	
1921.34	-0.03	-0.49	37.2	1921.33	-0.03	-0.45	38.0	1921.31	-0.04	-0.45	38.9	
1921.30	-0.04	-0.45	39.8	1921.28	-0.04	-0.45	40.8	1921.27	-0.04	-0.45	41.7	
1921.26	-0.04	-0.45	42.6	1921.25	-0.04	-0.44	43.5	1921.25	-0.05	-0.43	44.5	
1921.24	-0.05	-0.42	45.4	1921.24	-0.05	-0.41	46.3	1921.23	-0.05	-0.39	47.2	
1921.23	-0.05	-0.38	48.2	1921.22	-0.05	-0.37	49.1	1921.22	-0.05	-0.36	50.0	
1921.22	-0.05	-0.38	50.9	1921.23	-0.05	-0.39	51.8	1921.23	-0.05	-0.40	52.7	
1921.24	-0.05	-0.42	53.6	1921.24	-0.05	-0.43	54.5	1921.25	-0.05	-0.44	55.5	
1921.25	-0.04	-0.46	56.4	1921.25	-0.04	-0.47	57.3	1921.27	-0.04	-0.48	58.2	
1921.28	-0.04	-0.48	59.1	1921.30	-0.04	-0.48	60.0	1921.31	-0.04	-0.51	60.9	
1921.33	-0.03	-0.53	61.8	1921.34	-0.03	-0.55	62.6	1921.35	-0.03	-0.58	63.5	
1921.37	-0.03	-0.60	64.4	1921.38	-0.03	-0.62	65.2	1921.39	-0.03	-0.65	66.1	
1921.41	-0.03	-0.67	67.0	1921.43	-0.02	-1.03	67.7	1921.70	-0.01	-1.13	69.6	
1921.85	-0.01	-1.36	70.3	1921.94	0.00	-1.64	70.7	1922.01	0.01	-1.60	71.7	
1922.16	0.00	-1.47	71.9	1922.84	0.00	-0.81	72.9	1923.53	0.00	-0.15	73.8	
1923.70	0.00	0.00	74.8	1923.72	0.00	0.00	75.7	1923.75	0.00	0.00	76.7	
1923.77	0.00	0.00	77.6	1923.79	0.00	0.00	78.6	1923.82	0.00	0.00	79.5	
1923.84	0.00	0.00	80.5	1923.87	0.00	0.00	81.4	1923.89	0.00	0.00	82.4	
1923.91	0.00	0.00	83.3	1923.94	0.00	0.00	84.3	1923.96	0.00	0.00	85.2	
1923.98	0.00	0.00	86.2	1924.01	0.00	0.00	87.1	1924.03	0.00	0.00	88.1	
1924.06	0.00	0.00	89.0	1924.08	0.00	0.00	90.0					

ID  
9 SECTION 163.00 TIME = 19.87 HRS WS =1920.80 WIDTH = 41.3

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1922.74	0.00	0.00	10.0	1922.69	0.00	0.00	10.9	1922.64	0.00	0.00	11.9	
1922.59	0.00	0.00	12.8	1922.54	0.00	0.00	13.8	1922.49	0.00	0.00	14.7	
1922.44	0.00	0.00	15.7	1922.39	0.00	0.00	16.6	1922.34	0.00	0.00	17.6	
1922.29	0.00	0.00	18.6	1922.24	0.00	0.00	19.5	1922.19	0.00	0.00	20.5	
1922.14	0.00	0.00	21.4	1922.09	0.00	0.00	22.4	1922.02	0.00	-0.02	23.3	
1921.33	0.00	-0.66	24.3	1920.92	0.00	-1.02	24.9	1920.87	0.00	-1.02	25.5	
1920.85	0.00	-0.99	26.5	1920.81	0.00	-0.98	27.3	1920.80	0.00	-0.94	28.3	
1920.74	0.00	-0.70	28.9	1920.63	0.00	-0.51	29.9	1920.56	0.00	-0.28	31.2	
1920.50	0.00	-0.04	32.2	1920.44	0.00	0.20	33.0	1920.37	0.00	0.18	33.8	
1920.30	0.00	0.16	34.7	1920.22	0.00	0.13	35.5	1920.12	0.00	0.08	36.3	
1920.05	0.00	0.06	37.2	1920.02	0.00	0.08	38.0	1920.00	0.00	0.07	38.9	

1920.00	0.02	0.09	39.8	1920.00	0.04	0.10	40.8	1920.00	0.04	0.12	41.7
1920.00	0.04	0.13	42.6	1920.00	0.05	0.15	43.5	1920.00	0.05	0.16	44.5
1920.00	0.06	0.18	45.4	1920.00	0.06	0.19	46.3	1920.00	0.07	0.21	47.2
1920.00	0.07	0.23	48.2	1920.00	0.07	0.24	49.1	1920.00	0.08	0.25	50.0
1920.00	0.07	0.24	50.9	1920.00	0.07	0.22	51.8	1920.00	0.07	0.20	52.7
1920.00	0.06	0.18	53.6	1920.00	0.06	0.17	54.5	1920.00	0.05	0.15	55.5
1920.00	0.05	0.13	56.4	1920.00	0.05	0.11	57.3	1920.00	0.04	0.09	58.2
1920.00	0.04	0.07	59.1	1920.00	0.02	0.06	60.0	1920.00	0.00	0.02	60.9
1920.01	0.00	0.00	61.8	1920.04	0.00	-0.02	62.6	1920.10	0.00	0.01	63.5
1920.21	0.00	0.08	64.4	1920.29	0.00	0.12	65.2	1920.36	0.00	0.16	66.1
1920.44	0.00	0.20	67.0	1920.55	0.00	-0.19	68.4	1920.81	0.00	-0.43	69.2
1920.87	0.00	-0.88	70.0	1920.85	0.00	-1.39	70.8	1920.88	0.00	-1.38	71.7
1921.00	0.00	-1.28	72.2	1921.49	0.00	-0.82	72.9	1922.18	0.00	-0.16	73.8
1922.36	0.00	0.00	74.8	1922.38	0.00	0.00	75.7	1922.41	0.00	0.00	76.7
1922.43	0.00	0.00	77.6	1922.45	0.00	0.00	78.6	1922.48	0.00	0.00	79.5
1922.50	0.00	0.00	80.5	1922.53	0.00	0.00	81.4	1922.55	0.00	0.00	82.4
1922.57	0.00	0.00	83.3	1922.60	0.00	0.00	84.3	1922.62	0.00	0.00	85.2
1922.64	0.00	0.00	86.2	1922.67	0.00	0.00	87.1	1922.69	0.00	0.00	88.1
1922.72	0.00	0.00	89.0	1922.74	0.00	0.00	90.0				

ID  
8 SECTION 162.00 TIME = 19.87 HRS WS =1918.80 WIDTH = 43.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1920.39	0.00	0.00	10.0	1920.38	0.00	0.00	10.9	1920.37	0.00	0.00	11.9
1920.36	0.00	0.00	12.8	1920.35	0.00	0.00	13.8	1920.34	0.00	0.00	14.7
1920.33	0.00	0.00	15.7	1920.32	0.00	0.00	16.6	1920.31	0.00	0.00	17.6
1920.30	0.00	0.00	18.6	1920.29	0.00	0.00	19.5	1920.28	0.00	0.00	20.5
1920.27	0.00	0.00	21.4	1920.26	0.00	0.00	22.4	1920.25	0.00	0.00	23.3
1920.24	0.00	0.00	24.3	1920.11	0.00	-0.12	25.2	1919.42	0.00	-0.80	26.2
1918.87	0.00	-1.34	26.9	1918.80	0.01	-1.40	27.1	1918.72	0.00	-1.47	27.8
1918.69	0.00	-1.14	28.8	1918.41	-0.01	-1.06	30.0	1918.39	-0.01	-0.72	30.5
1918.32	-0.02	-0.43	32.1	1918.27	-0.02	-0.12	33.0	1918.23	-0.02	-0.10	33.8
1918.18	-0.02	-0.09	34.6	1918.14	-0.03	-0.07	35.4	1918.11	-0.03	-0.04	36.2
1918.08	-0.03	-0.01	37.0	1918.04	-0.03	-0.03	37.9	1918.02	-0.03	-0.04	38.9
1918.02	-0.03	-0.03	39.8	1918.01	-0.03	-0.02	40.7	1918.01	-0.04	-0.01	41.6
1918.00	-0.04	0.00	42.6	1918.00	-0.04	0.01	43.5	1917.99	-0.04	0.02	44.4
1917.99	-0.04	0.03	45.4	1917.99	-0.04	0.04	46.3	1917.99	-0.04	0.05	47.2
1917.98	-0.04	0.07	48.1	1917.98	-0.04	0.08	49.1	1917.98	-0.04	0.09	50.0
1917.98	-0.04	0.07	50.9	1917.98	-0.04	0.06	51.8	1917.99	-0.04	0.04	52.7
1917.99	-0.04	0.02	53.6	1917.99	-0.04	0.01	54.5	1917.99	-0.04	-0.01	55.5
1918.00	-0.04	-0.02	56.4	1918.00	-0.04	-0.03	57.3	1918.01	-0.04	-0.05	58.2
1918.01	-0.03	-0.06	59.1	1918.01	-0.03	-0.08	60.0	1918.02	-0.03	-0.11	60.9
1918.03	-0.03	-0.14	61.8	1918.06	-0.03	-0.14	62.6	1918.10	-0.03	-0.14	63.5
1918.13	-0.03	-0.14	64.4	1918.17	-0.02	-0.14	65.2	1918.22	-0.02	-0.13	66.1
1918.29	-0.02	-0.10	67.4	1918.35	-0.02	-0.66	68.6	1918.71	0.00	-0.93	69.4
1918.80	0.01	-1.46	70.1	1918.90	0.00	-1.99	70.4	1919.32	0.00	-1.60	71.0
1920.01	0.00	-0.93	71.9	1920.70	0.00	-0.26	72.9	1920.99	0.00	0.00	73.8
1921.01	0.00	0.00	74.8	1921.03	0.00	0.00	75.7	1921.06	0.00	0.00	76.7
1921.08	0.00	0.00	77.6	1921.10	0.00	0.00	78.6	1921.13	0.00	0.00	79.5
1921.15	0.00	0.00	80.5	1921.18	0.00	0.00	81.4	1921.20	0.00	0.00	82.4
1921.22	0.00	0.00	83.3	1921.25	0.00	0.00	84.3	1921.27	0.00	0.00	85.2
1921.29	0.00	0.00	86.2	1921.32	0.00	0.00	87.1	1921.34	0.00	0.00	88.1
1921.37	0.00	0.00	89.0	1921.39	0.00	0.00	90.0				

ID  
7 SECTION 161.00 TIME = 19.87 HRS WS =1917.71 WIDTH = 48.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1918.06	0.00	0.00	10.0	1918.08	0.00	0.00	10.9	1918.10	0.00	0.00	11.9
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1918.13	0.00	0.00	12.8	1918.15	0.00	0.00	13.8	1918.18	0.00	0.00	14.7
1918.20	0.00	0.00	15.7	1918.23	0.00	0.00	16.6	1918.25	0.00	0.00	17.6
1918.28	0.00	0.00	18.6	1918.30	0.00	0.00	19.5	1918.33	0.00	0.00	20.5
1918.35	0.00	0.00	21.4	1918.38	0.00	0.00	22.4	1917.95	-0.05	-0.45	23.3
1917.62	-0.01	-0.80	23.8	1917.50	-0.07	-0.95	24.5	1917.52	-0.07	-0.96	25.4
1917.53	-0.07	-0.97	26.4	1917.50	-0.07	-1.02	27.5	1917.50	-0.07	-1.05	28.3
1917.51	-0.07	-0.64	29.3	1917.51	0.01	-0.24	30.1	1917.42	0.01	0.07	31.0
1917.33	0.01	0.38	32.2	1917.26	0.02	0.71	33.0	1917.18	0.02	0.69	33.8
1917.08	0.02	0.66	34.6	1917.02	0.02	0.65	35.4	1916.96	0.02	0.65	36.2
1916.89	0.02	0.64	37.0	1916.85	0.02	0.61	37.9	1916.84	0.02	0.62	38.9
1916.84	0.02	0.63	39.8	1916.84	0.02	0.65	40.7	1916.84	0.02	0.66	41.6
1916.83	0.02	0.67	42.6	1916.83	0.02	0.68	43.5	1916.83	0.02	0.69	44.4
1916.83	0.02	0.70	45.4	1916.82	0.02	0.72	46.3	1916.82	0.02	0.73	47.2
1916.82	0.02	0.74	48.1	1916.81	0.02	0.75	49.1	1916.81	0.02	0.76	50.0
1916.81	0.02	0.75	50.9	1916.82	0.02	0.74	51.8	1916.82	0.02	0.72	52.8
1916.82	0.02	0.71	53.7	1916.83	0.02	0.69	54.6	1916.83	0.02	0.68	55.5
1916.83	0.02	0.66	56.4	1916.83	0.02	0.65	57.3	1916.84	0.02	0.64	58.3
1916.84	0.02	0.62	59.2	1916.84	0.02	0.61	60.1	1916.84	0.02	0.59	61.0
1916.85	0.02	0.55	61.9	1916.87	0.02	0.53	62.7	1916.94	0.02	0.56	63.6
1917.01	0.02	0.59	64.4	1917.07	0.02	0.61	65.3	1917.17	0.02	0.66	66.1
1917.25	0.02	0.70	66.9	1917.28	-0.07	0.11	68.3	1917.26	-0.06	-0.54	69.2
1917.27	-0.07	-1.15	69.9	1917.34	-0.03	-1.72	71.3	1917.69	-0.02	-1.40	71.7
1917.86	-0.01	-1.29	71.9	1918.55	-0.01	-0.64	72.9	1919.24	0.00	0.00	73.8
1919.29	0.00	0.00	74.8	1919.34	0.00	0.00	75.7	1919.38	0.00	0.00	76.7
1919.43	0.00	0.00	77.6	1919.48	0.00	0.00	78.6	1919.53	0.00	0.00	79.5
1919.57	0.00	0.00	80.5	1919.62	0.00	0.00	81.4	1919.67	0.00	0.00	82.4
1919.72	0.00	0.00	83.3	1919.76	0.00	0.00	84.3	1919.81	0.00	0.00	85.2
1919.86	0.00	0.00	86.2	1919.91	0.00	0.00	87.1	1919.95	0.00	0.00	88.1
1920.00	0.00	0.00	89.0	1920.05	0.00	0.00	90.0				

## ID

6 SECTION 160.00 TIME = 19.87 HRS WS =1915.61 WIDTH = 45.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1916.21	0.00	0.00	10.0	1916.18	0.00	0.00	10.9	1916.16	0.00	0.00	11.9
1916.13	0.00	0.00	12.8	1916.11	0.00	0.00	13.8	1916.08	0.00	0.00	14.7
1916.06	0.00	0.00	15.7	1916.03	0.00	0.00	16.6	1916.01	0.00	0.00	17.6
1916.00	0.00	0.02	18.6	1915.96	0.00	0.00	19.5	1915.95	0.00	0.02	20.5
1915.95	0.00	0.04	21.4	1915.90	0.00	0.02	22.3	1915.88	0.00	0.02	23.3
1915.86	0.00	0.02	24.3	1915.85	0.00	0.04	25.2	1915.85	0.00	0.06	26.1
1915.51	0.05	-0.25	26.8	1915.47	0.01	-0.26	27.6	1915.39	0.01	-0.32	28.4
1915.42	0.01	-0.09	29.5	1915.38	0.02	0.07	30.5	1915.37	0.02	0.26	31.4
1915.21	0.02	0.30	32.2	1915.13	0.02	0.42	33.0	1915.09	0.02	0.45	33.8
1915.05	0.02	0.49	34.5	1915.01	0.02	0.53	35.2	1914.98	0.02	0.57	36.0
1914.94	0.03	0.54	36.9	1914.90	0.03	0.52	37.9	1914.86	0.03	0.49	38.8
1914.83	0.03	0.48	39.7	1914.81	0.03	0.47	40.7	1914.81	0.03	0.48	41.6
1914.80	0.03	0.49	42.5	1914.80	0.03	0.50	43.5	1914.80	0.03	0.50	44.4
1914.79	0.03	0.52	45.3	1914.79	0.03	0.53	46.3	1914.78	0.03	0.53	47.2
1914.78	0.03	0.54	48.1	1914.78	0.03	0.55	49.1	1914.77	0.03	0.56	50.0
1914.78	0.03	0.55	50.9	1914.78	0.03	0.54	51.8	1914.78	0.03	0.53	52.8
1914.79	0.03	0.52	53.7	1914.79	0.03	0.51	54.6	1914.80	0.03	0.49	55.5
1914.80	0.03	0.48	56.5	1914.80	0.03	0.47	57.4	1914.81	0.03	0.46	58.3
1914.81	0.03	0.45	59.2	1914.83	0.03	0.45	60.2	1914.86	0.03	0.46	61.1
1914.90	0.03	0.49	62.0	1914.93	0.03	0.47	62.8	1914.97	0.02	0.45	63.7
1915.00	0.02	0.44	64.5	1915.04	0.02	0.43	65.3	1915.08	0.02	0.42	66.2
1915.13	0.02	0.42	67.0	1915.21	0.02	0.24	67.8	1915.38	0.02	0.17	68.5
1915.40	0.01	-0.06	69.6	1915.39	0.02	-0.32	70.5	1915.45	0.01	-0.28	71.5
1915.51	0.05	-0.25	72.2	1915.85	0.00	0.07	72.9	1915.85	0.00	0.04	73.8
1915.85	0.00	0.02	74.7	1915.87	0.00	0.02	75.7	1915.88	0.00	0.00	76.6
1915.90	0.00	0.00	77.6	1915.95	0.00	0.02	78.6	1915.95	0.00	0.00	79.5
1915.97	0.00	0.00	80.5	1916.01	0.00	0.01	81.4	1916.02	0.00	0.00	82.4

1916.04 0.00 0.00 83.3 1916.07 0.00 0.00 84.3 1916.09 0.00 0.00 85.2  
 1916.11 0.00 0.00 86.2 1916.14 0.00 0.00 87.1 1916.16 0.00 0.00 88.1  
 1916.19 0.00 0.00 89.0 1916.21 0.00 0.00 90.0

ID  
 5 SECTION 159.00 TIME = 19.87 HRS WS =1912.51 WIDTH = 41.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1914.87	0.00	0.00	10.0	1914.84	0.00	0.00	10.9	1914.82	0.00	0.00	11.9
1914.79	0.00	0.00	12.8	1914.77	0.00	0.00	13.8	1914.74	0.00	0.00	14.7
1914.72	0.00	0.00	15.7	1914.69	0.00	0.00	16.6	1914.67	0.00	0.00	17.6
1914.64	0.00	0.00	18.6	1914.62	0.00	0.00	19.5	1914.59	0.00	0.00	20.5
1914.57	0.00	0.00	21.4	1914.54	0.00	0.00	22.4	1914.52	0.00	0.00	23.3
1914.49	0.00	0.00	24.3	1914.47	0.00	0.00	25.2	1914.44	0.00	0.00	26.2
1914.07	0.00	-0.35	27.1	1913.38	0.00	-1.02	28.1	1912.70	0.00	-1.67	29.0
1912.55	0.00	-1.52	29.2	1912.41	-0.03	-1.36	29.4	1912.34	0.00	-1.13	30.6
1911.97	0.00	-1.20	32.2	1911.89	0.00	-0.98	33.0	1911.86	0.00	-0.94	33.8
1911.82	0.00	-0.90	34.5	1911.79	0.00	-0.86	35.2	1911.75	0.00	-0.82	36.0
1911.71	0.00	-0.85	36.9	1911.70	0.00	-0.84	37.9	1911.69	0.00	-0.84	38.8
1911.69	0.00	-0.83	39.7	1911.69	0.00	-0.82	40.7	1911.68	0.00	-0.80	41.6
1911.68	0.00	-0.80	42.5	1911.68	0.00	-0.79	43.5	1911.67	0.00	-0.78	44.4
1911.67	0.00	-0.77	45.3	1911.66	0.00	-0.76	46.3	1911.66	0.00	-0.75	47.2
1911.66	0.00	-0.74	48.1	1911.65	0.00	-0.73	49.1	1911.65	0.00	-0.72	50.0
1911.65	0.00	-0.73	50.9	1911.66	0.00	-0.74	51.9	1911.66	0.00	-0.75	52.8
1911.66	0.00	-0.76	53.7	1911.67	0.00	-0.77	54.6	1911.67	0.00	-0.79	55.6
1911.68	0.00	-0.79	56.5	1911.68	0.00	-0.80	57.4	1911.68	0.00	-0.81	58.4
1911.69	0.00	-0.82	59.3	1911.69	0.00	-0.84	60.2	1911.69	0.00	-0.85	61.1
1911.70	0.00	-0.86	62.1	1911.71	0.00	-0.86	63.0	1911.74	0.00	-0.88	63.8
1911.78	0.00	-0.91	64.6	1911.82	0.00	-0.93	65.4	1911.85	0.00	-0.95	66.2
1911.89	0.00	-0.98	67.0	1912.07	0.00	-1.18	68.2	1912.15	-0.03	-1.47	69.7
1912.57	0.00	-1.43	70.4	1912.71	0.00	-1.66	70.6	1912.99	0.00	-1.40	71.0
1913.68	0.00	-0.73	71.9	1914.38	0.00	-0.07	72.9	1914.47	0.00	0.00	73.8
1914.49	0.00	0.00	74.8	1914.51	0.00	0.00	75.7	1914.54	0.00	0.00	76.7
1914.56	0.00	0.00	77.6	1914.58	0.00	0.00	78.6	1914.61	0.00	0.00	79.5
1914.63	0.00	0.00	80.5	1914.66	0.00	0.00	81.4	1914.68	0.00	0.00	82.4
1914.70	0.00	0.00	83.3	1914.73	0.00	0.00	84.3	1914.75	0.00	0.00	85.2
1914.77	0.00	0.00	86.2	1914.80	0.00	0.00	87.1	1914.82	0.00	0.00	88.1
1914.85	0.00	0.00	89.0	1914.87	0.00	0.00	90.0				

ID  
 4 SECTION 158.00 TIME = 19.87 HRS WS =1911.09 WIDTH = 37.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1913.53	0.00	0.00	10.0	1913.51	0.00	0.00	10.9	1913.48	0.00	0.00	11.9
1913.45	0.00	0.00	12.8	1913.43	0.00	0.00	13.8	1913.40	0.00	0.00	14.7
1913.38	0.00	0.00	15.7	1913.35	0.00	0.00	16.6	1913.33	0.00	0.00	17.6
1913.30	0.00	0.00	18.6	1913.28	0.00	0.00	19.5	1913.25	0.00	0.00	20.5
1913.23	0.00	0.00	21.4	1913.20	0.00	0.00	22.4	1913.18	0.00	0.00	23.3
1913.15	0.00	0.00	24.3	1913.13	0.00	0.00	25.2	1913.10	0.00	0.00	26.2
1913.08	0.00	0.00	27.1	1912.59	0.00	-0.46	28.1	1911.90	0.00	-1.13	29.0
1911.66	0.00	-0.97	29.3	1911.44	0.00	-0.79	29.7	1911.19	0.00	-0.64	30.4
1910.82	0.02	-0.61	31.2	1910.62	-0.01	-0.41	33.2	1910.67	-0.01	-0.26	33.7
1910.58	-0.01	-0.25	34.3	1910.54	-0.01	-0.19	35.0	1910.49	-0.01	-0.23	35.9
1910.43	-0.01	-0.27	36.9	1910.36	-0.01	-0.33	37.8	1910.30	-0.01	-0.38	38.8
1910.22	-0.02	-0.44	39.7	1910.21	-0.02	-0.45	40.6	1910.21	-0.02	-0.44	41.6
1910.21	-0.02	-0.43	42.5	1910.20	-0.02	-0.41	43.4	1910.20	-0.02	-0.40	44.4
1910.20	-0.02	-0.39	45.3	1910.20	-0.02	-0.38	46.2	1910.20	-0.02	-0.37	47.2
1910.20	-0.02	-0.36	48.1	1910.19	-0.02	-0.35	49.1	1910.19	-0.02	-0.34	50.0
1910.19	-0.02	-0.35	50.9	1910.20	-0.02	-0.36	51.9	1910.20	-0.02	-0.37	52.8
1910.20	-0.02	-0.39	53.7	1910.20	-0.02	-0.40	54.7	1910.20	-0.02	-0.41	55.6

1910.20	-0.02	-0.42	56.5	1910.21	-0.02	-0.43	57.5	1910.21	-0.02	-0.44	58.4
1910.21	-0.02	-0.45	59.3	1910.22	-0.02	-0.46	60.3	1910.29	-0.01	-0.40	61.2
1910.36	-0.01	-0.34	62.1	1910.43	-0.01	-0.29	63.1	1910.48	-0.01	-0.24	64.0
1910.53	-0.01	-0.27	64.8	1910.57	-0.01	-0.31	65.5	1910.66	-0.01	-0.29	66.3
1910.98	0.02	-0.05	67.4	1911.20	0.00	-0.34	68.4	1911.46	0.00	-0.57	69.3
1911.54	0.00	-0.99	69.8	1911.64	0.00	-1.38	70.1	1912.28	0.00	-0.77	71.0
1912.97	0.00	-0.10	71.9	1913.10	0.00	0.00	72.9	1913.13	0.00	0.00	73.8
1913.15	0.00	0.00	74.8	1913.17	0.00	0.00	75.7	1913.20	0.00	0.00	76.7
1913.22	0.00	0.00	77.6	1913.24	0.00	0.00	78.6	1913.27	0.00	0.00	79.5
1913.29	0.00	0.00	80.5	1913.32	0.00	0.00	81.4	1913.34	0.00	0.00	82.4
1913.36	0.00	0.00	83.3	1913.39	0.00	0.00	84.3	1913.41	0.00	0.00	85.2
1913.43	0.00	0.00	86.2	1913.46	0.00	0.00	87.1	1913.48	0.00	0.00	88.1
1913.51	0.00	0.00	89.0	1913.53	0.00	0.00	90.0				

ID  
3 SECTION 157.00 TIME = 19.87 HRS WS =1909.71 WIDTH = 33.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1912.68	0.00	0.00	10.0	1912.63	0.00	0.00	10.9	1912.58	0.00	0.00	11.9
1912.53	0.00	0.00	12.8	1912.48	0.00	0.00	13.8	1912.43	0.00	0.00	14.7
1912.38	0.00	0.00	15.7	1912.33	0.00	0.00	16.6	1912.28	0.00	0.00	17.6
1912.23	0.00	0.00	18.6	1912.18	0.00	0.00	19.5	1912.13	0.00	0.00	20.5
1912.08	0.00	0.00	21.4	1912.03	0.00	0.00	22.4	1911.98	0.00	0.00	23.3
1911.93	0.00	0.00	24.3	1911.88	0.00	0.00	25.2	1911.83	0.00	0.00	26.2
1911.51	0.00	-0.27	27.1	1910.81	0.00	-0.91	28.1	1910.26	0.00	-1.42	28.8
1910.20	0.00	-0.98	29.1	1910.15	0.00	-0.53	29.5	1910.09	0.00	-0.09	30.6
1910.02	0.00	0.34	31.2	1909.96	0.00	0.78	33.1	1909.90	0.00	0.82	33.7
1909.92	0.00	0.94	34.3	1909.77	0.00	0.89	35.0	1909.43	-0.05	0.56	35.6
1909.38	0.01	0.53	36.6	1909.38	0.01	0.53	37.4	1909.35	0.01	0.52	38.5
1908.91	0.02	0.09	39.7	1908.85	0.02	0.05	40.6	1908.79	0.02	0.00	41.6
1908.73	0.02	-0.05	42.5	1908.66	0.02	-0.10	43.4	1908.62	0.02	-0.13	44.4
1908.59	0.02	-0.15	45.3	1908.57	0.02	-0.16	46.2	1908.56	0.02	-0.15	47.2
1908.56	0.02	-0.14	48.1	1908.56	0.02	-0.13	49.1	1908.55	0.02	-0.13	50.0
1908.56	0.02	-0.13	50.9	1908.56	0.02	-0.15	51.9	1908.56	0.02	-0.16	52.8
1908.57	0.02	-0.16	53.7	1908.59	0.02	-0.16	54.7	1908.62	0.02	-0.14	55.6
1908.66	0.02	-0.11	56.5	1908.72	0.02	-0.06	57.5	1908.79	0.02	-0.01	58.4
1908.85	0.02	0.04	59.3	1908.91	0.02	0.08	60.3	1909.15	0.01	0.31	61.3
1909.22	0.01	0.37	62.4	1909.42	0.01	0.55	63.1	1909.29	0.01	0.41	63.9
1909.38	0.01	0.43	65.0	1909.41	0.01	0.38	65.7	1909.38	0.01	0.28	66.3
1909.44	-0.05	0.26	68.2	1909.92	0.00	0.12	68.9	1910.03	0.00	-0.40	69.3
1910.11	0.00	-0.94	69.9	1910.34	0.00	-1.34	70.7	1910.51	0.00	-1.19	71.0
1911.20	0.00	-0.53	71.9	1911.75	0.00	0.00	72.9	1911.78	0.00	0.00	73.8
1911.80	0.00	0.00	74.8	1911.82	0.00	0.00	75.7	1911.85	0.00	0.00	76.7
1911.87	0.00	0.00	77.6	1911.89	0.00	0.00	78.6	1911.92	0.00	0.00	79.5
1911.94	0.00	0.00	80.5	1911.97	0.00	0.00	81.4	1911.99	0.00	0.00	82.4
1912.01	0.00	0.00	83.3	1912.04	0.00	0.00	84.3	1912.06	0.00	0.00	85.2
1912.08	0.00	0.00	86.2	1912.11	0.00	0.00	87.1	1912.13	0.00	0.00	88.1
1912.16	0.00	0.00	89.0	1912.18	0.00	0.00	90.0				

ID  
2 SECTION 156.00 TIME = 19.87 HRS WS =1907.00 WIDTH = 17.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1910.84	0.00	0.00	10.0	1910.79	0.00	0.00	10.9	1910.74	0.00	0.00	11.9
1910.69	0.00	0.00	12.8	1910.64	0.00	0.00	13.8	1910.59	0.00	0.00	14.7
1910.54	0.00	0.00	15.7	1910.49	0.00	0.00	16.6	1910.44	0.00	0.00	17.6
1910.39	0.00	0.00	18.6	1910.34	0.00	0.00	19.5	1910.29	0.00	0.00	20.5
1910.24	0.00	0.00	21.4	1910.19	0.00	0.00	22.4	1910.14	0.00	0.00	23.3
1910.09	0.00	0.00	24.3	1910.04	0.00	0.00	25.2	1909.99	0.00	0.00	26.2
1909.94	0.00	0.00	27.1	1909.89	0.00	0.00	28.1	1909.84	0.00	0.00	29.0

1909.34	0.00	0.00	29.8	1908.84	0.00	0.00	30.6	1908.34	0.00	0.00	31.4
1908.04	0.00	0.20	32.4	1907.91	0.00	0.57	33.5	1907.78	0.00	0.54	34.0
1907.63	0.00	0.49	34.8	1907.51	0.00	0.47	35.3	1907.30	0.00	0.28	36.4
1907.29	0.00	0.27	37.6	1907.27	0.00	0.27	38.5	1907.24	0.00	0.25	39.5
1907.08	0.00	0.10	40.5	1906.95	0.00	-0.01	41.4	1906.77	-0.02	-0.19	41.6
1906.09	-0.01	-0.85	42.5	1905.43	-0.05	-1.50	43.4	1905.43	-0.05	-1.49	44.4
1905.43	-0.05	-1.48	45.3	1905.43	-0.05	-1.46	46.2	1905.42	-0.05	-1.45	47.2
1905.42	-0.05	-1.44	48.1	1905.42	-0.05	-1.43	49.1	1905.42	-0.05	-1.42	50.0
1905.42	-0.05	-1.43	50.9	1905.42	-0.05	-1.44	51.9	1905.42	-0.05	-1.45	52.8
1905.43	-0.05	-1.47	53.7	1905.43	-0.05	-1.48	54.7	1905.43	-0.05	-1.49	55.6
1906.10	-0.01	-0.83	56.5	1906.81	-0.01	-0.14	57.4	1906.95	-0.01	0.00	57.6
1907.05	0.00	0.08	58.6	1907.14	0.00	0.16	59.5	1907.24	0.00	0.24	60.4
1907.27	0.00	0.26	61.5	1907.29	0.00	0.27	62.3	1907.32	0.00	0.28	63.9
1907.51	0.00	0.40	64.3	1907.69	0.00	0.51	65.1	1907.81	0.00	0.54	66.0
1907.94	0.00	0.60	66.6	1908.04	0.00	0.08	67.6	1908.66	0.00	0.07	68.5
1909.20	0.00	-0.01	69.2	1909.75	0.00	-0.09	70.0	1909.89	0.00	0.00	71.0
1909.94	0.00	0.00	71.9	1909.98	0.00	0.00	72.9	1910.03	0.00	0.00	73.8
1910.08	0.00	0.00	74.8	1910.13	0.00	0.00	75.7	1910.17	0.00	0.00	76.7
1910.22	0.00	0.00	77.6	1910.27	0.00	0.00	78.6	1910.32	0.00	0.00	79.5
1910.36	0.00	0.00	80.5	1910.41	0.00	0.00	81.4	1910.46	0.00	0.00	82.4
1910.51	0.00	0.00	83.3	1910.55	0.00	0.00	84.3	1910.60	0.00	0.00	85.2
1910.65	0.00	0.00	86.2	1910.70	0.00	0.00	87.1	1910.74	0.00	0.00	88.1
1910.79	0.00	0.00	89.0	1910.84	0.00	0.00	90.0				

ID  
1 SECTION 155.00 TIME = 19.87 HRS WS = 1906.90 WIDTH = 37.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1909.00	0.00	0.00	10.0	1908.95	0.00	0.00	10.9	1908.90	0.00	0.00	11.9
1908.85	0.00	0.00	12.8	1908.80	0.00	0.00	13.8	1908.75	0.00	0.00	14.7
1908.70	0.00	0.00	15.7	1908.65	0.00	0.00	16.6	1908.60	0.00	0.00	17.6
1908.55	0.00	0.00	18.6	1908.50	0.00	0.00	19.5	1908.45	0.00	0.00	20.5
1908.40	0.00	0.00	21.4	1908.35	0.00	0.00	22.4	1908.30	0.00	0.00	23.3
1908.25	0.00	0.00	24.3	1908.20	0.00	0.00	25.2	1908.15	0.00	0.00	26.2
1908.10	0.00	0.00	27.1	1908.05	0.00	0.00	28.1	1908.00	0.00	0.00	29.0
1907.50	0.00	0.00	29.8	1907.00	0.00	0.00	30.6	1906.50	0.00	0.00	31.4
1906.00	0.00	0.00	32.2	1905.50	0.00	0.00	33.0	1905.40	0.00	0.00	33.7
1905.30	0.00	0.00	34.3	1905.20	0.00	0.00	35.0	1905.19	0.00	0.00	35.9
1905.18	0.00	0.00	36.9	1905.16	0.00	0.00	37.8	1905.15	0.00	0.00	38.8
1905.14	0.00	0.00	39.7	1905.13	0.00	0.00	40.6	1905.11	-0.02	0.00	41.6
1905.10	-0.01	0.00	42.5	1905.09	-0.05	0.00	43.4	1905.08	-0.05	0.00	44.4
1905.06	-0.05	0.00	45.3	1905.05	-0.05	0.00	46.2	1905.04	-0.05	0.00	47.2
1905.03	-0.05	0.00	48.1	1905.01	-0.05	0.00	49.1	1905.00	-0.05	0.00	50.0
1905.01	-0.05	0.00	50.9	1905.02	-0.05	0.00	51.9	1905.04	-0.05	0.00	52.8
1905.05	-0.05	0.00	53.8	1905.06	-0.05	0.00	54.7	1905.07	-0.05	0.00	55.6
1905.09	-0.01	0.00	56.6	1905.10	-0.01	0.00	57.5	1905.11	-0.01	0.00	58.4
1905.12	0.00	0.00	59.4	1905.14	0.00	0.00	60.3	1905.15	0.00	0.00	61.2
1905.16	0.00	0.00	62.2	1905.17	0.00	0.00	63.1	1905.19	0.00	0.00	64.1
1905.20	0.00	0.00	65.0	1905.30	0.00	0.00	65.7	1905.40	0.00	0.00	66.3
1905.50	0.00	0.00	67.0	1906.12	0.00	0.00	67.8	1906.75	0.00	0.00	68.5
1907.38	0.00	0.00	69.2	1908.00	0.00	0.00	70.0	1908.05	0.00	0.00	71.0
1908.10	0.00	0.00	71.9	1908.14	0.00	0.00	72.9	1908.19	0.00	0.00	73.8
1908.24	0.00	0.00	74.8	1908.29	0.00	0.00	75.7	1908.33	0.00	0.00	76.7
1908.38	0.00	0.00	77.6	1908.43	0.00	0.00	78.6	1908.48	0.00	0.00	79.5
1908.52	0.00	0.00	80.5	1908.57	0.00	0.00	81.4	1908.62	0.00	0.00	82.4
1908.67	0.00	0.00	83.3	1908.71	0.00	0.00	84.3	1908.76	0.00	0.00	85.2
1908.81	0.00	0.00	86.2	1908.86	0.00	0.00	87.1	1908.90	0.00	0.00	88.1
1908.95	0.00	0.00	89.0	1909.00	0.00	0.00	90.0				

1  
TIME = 29.06 HRS DT = 120 SECS TIME STEP = 900

SECTION W.S.ELEV. WIDTH DEPTH Q V SLOPE D50 QS/Q FR SED. YIELD											
FT	FT	FT	CFS	FPS	MM	1000 PPM		TONS			

155.000	1906.74	37.5	1.74	83	1.46	0.000517	0.47	0.29	0.21	0.485E+03
156.000	1906.84	14.1	1.48	83	4.86	0.008081	0.54	10.11	0.78	0.605E+04
157.000	1909.31	32.6	0.93	83	3.91	0.011164	0.53	9.51	0.85	0.608E+04
158.000	1910.45	33.0	0.84	83	4.00	0.012124	0.57	10.65	0.89	0.604E+04
159.000	1912.25	40.7	0.83	83	3.74	0.012839	0.60	10.75	0.89	0.589E+04
160.000	1915.55	46.1	0.92	83	3.57	0.012934	0.55	8.41	0.89	0.569E+04
161.000	1917.45	47.3	0.92	83	3.55	0.013199	0.56	11.11	0.89	0.581E+04
162.000	1918.69	43.5	0.84	83	3.55	0.011735	0.60	7.86	0.85	0.588E+04
163.000	1920.69	46.7	0.84	83	3.40	0.011196	0.49	7.91	0.83	0.584E+04
164.000	1921.79	43.6	0.79	83	3.58	0.012187	0.55	9.08	0.87	0.582E+04
165.000	1923.01	43.8	0.87	83	3.60	0.012482	0.76	9.67	0.88	0.565E+04
166.000	1924.55	40.4	0.85	83	3.46	0.009829	0.51	4.06	0.79	0.537E+04
167.000	1927.85	20.0	0.97	83	4.72	0.011166	0.54	12.00	0.89	0.513E+04
168.000	1930.85	62.4	0.88	83	3.38	0.016180	0.46	14.47	0.95	0.542E+04
169.000	1932.39	46.8	0.72	83	3.73	0.015371	0.36	13.52	0.95	0.575E+04
170.000	1934.09	50.3	0.71	83	3.12	0.009287	0.42	16.95	0.76	0.602E+04
171.000	1935.58	25.1	0.84	83	4.65	0.014048	0.53	28.18	0.97	0.622E+04
172.000	1939.08	62.0	0.87	83	3.18	0.013043	0.40	9.51	0.86	0.644E+04
173.000	1940.17	40.7	0.82	83	3.51	0.010483	0.41	11.27	0.81	0.707E+04
174.000	1941.12	65.2	1.12	83	2.46	0.005951	0.52	5.68	0.60	0.747E+04

ID  
19 SECTION 173.00 TIME = 29.06 HRS WS =1940.17 WIDTH = 40.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1940.66	0.00	0.00	10.0	1940.41	0.00	0.96	10.9	1940.41	0.00	0.97	11.9
1940.41	0.00	0.98	12.8	1940.40	0.00	0.98	13.8	1940.40	0.00	0.99	14.7
1940.40	0.00	1.00	15.7	1940.39	0.00	1.00	16.6	1940.39	0.00	1.01	17.6
1940.38	0.00	1.01	18.6	1940.37	0.00	1.01	19.5	1940.36	0.00	1.01	20.5
1940.36	0.00	1.02	21.4	1940.35	0.00	1.03	22.4	1940.35	0.00	1.03	23.3
1940.34	0.00	1.03	24.3	1940.33	0.00	1.03	25.2	1940.32	0.00	1.03	26.2
1940.30	0.00	1.02	27.1	1940.27	0.00	1.00	28.1	1940.25	0.00	0.99	29.0
1940.11	0.00	0.97	29.8	1940.10	0.00	1.08	30.6	1940.09	0.00	1.20	31.4
1940.09	0.00	1.31	32.2	1940.09	0.00	1.42	33.0	1940.07	0.00	1.44	33.9
1940.07	0.00	1.46	34.8	1939.99	0.00	1.40	35.8	1939.35	-0.01	0.79	36.7
1939.35	-0.01	0.81	37.6	1939.35	-0.01	0.84	38.5	1939.35	-0.01	0.86	39.4
1939.35	-0.01	0.88	40.3	1939.34	-0.01	0.91	41.3	1939.34	-0.01	0.93	42.2
1939.34	-0.01	0.96	43.1	1939.34	-0.01	0.98	44.0	1939.34	-0.01	1.01	44.9
1939.34	-0.01	1.04	45.7	1939.34	-0.01	1.07	46.6	1939.34	-0.01	1.09	47.4
1939.34	-0.01	1.12	48.3	1939.34	-0.01	1.15	49.1	1939.34	-0.01	1.17	50.0
1939.34	-0.01	1.14	50.8	1939.34	-0.01	1.11	51.7	1939.34	-0.01	1.08	52.5
1939.34	-0.01	1.04	53.3	1939.34	-0.01	1.01	54.2	1939.34	-0.01	0.98	55.0
1939.34	-0.01	0.96	55.9	1939.34	-0.01	0.94	56.8	1939.34	-0.01	0.91	57.8
1939.34	-0.01	0.89	58.7	1939.35	-0.01	0.87	59.6	1939.35	-0.01	0.85	60.5
1939.35	-0.01	0.82	61.5	1939.35	-0.01	0.80	62.4	1939.35	-0.01	0.79	63.3
1940.01	0.00	1.41	64.2	1940.07	0.00	1.45	65.2	1940.07	0.00	1.44	66.1
1940.09	0.00	1.42	67.0	1940.09	0.00	1.28	67.8	1940.09	0.00	1.13	68.5
1940.10	0.00	0.99	69.2	1940.15	0.00	0.90	70.0	1940.24	0.00	0.98	70.9
1940.27	0.00	0.99	71.8	1940.30	0.00	1.02	72.7	1940.32	0.00	1.02	73.6
1940.33	0.00	1.02	74.5	1940.34	0.00	1.03	75.5	1940.35	0.00	1.02	76.4
1940.35	0.00	1.02	77.3	1940.36	0.00	1.02	78.2	1940.42	0.00	1.07	79.1
1940.66	0.00	0.00	80.0								

ID  
18 SECTION 172.00 TIME = 29.06 HRS WS =1939.08 WIDTH = 62.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1939.61	0.00	0.00	10.0	1939.33	0.00	1.82	10.9	1939.32	0.00	1.82	12.3
1939.31	0.00	1.83	13.0	1939.22	0.00	1.74	13.8	1939.17	0.00	1.70	14.6
1938.91	0.01	1.45	15.6	1938.89	0.00	1.44	16.7	1938.88	0.00	1.44	17.6
1938.88	0.00	1.45	18.5	1938.87	0.00	1.45	19.3	1938.87	0.00	1.46	20.5
1938.85	0.00	1.45	21.7	1938.87	0.00	1.48	22.4	1938.86	0.00	1.48	23.3
1938.86	0.00	1.48	24.3	1938.85	0.00	1.49	25.2	1938.85	0.00	1.50	26.2
1938.89	0.00	1.56	27.1	1938.87	0.00	1.54	27.8	1938.88	0.00	1.56	28.9
1938.86	0.00	1.64	29.8	1938.87	0.00	1.75	30.5	1938.86	0.00	1.84	31.2
1938.87	0.00	1.95	32.0	1938.85	0.00	2.03	32.7	1938.84	0.00	2.05	33.6
1938.84	0.00	2.08	34.4	1938.82	0.00	2.09	35.2	1938.83	0.00	2.12	36.2
1938.75	0.00	2.07	37.2	1938.55	0.00	1.89	38.5	1938.50	0.00	1.87	39.4
1938.45	0.00	1.85	40.3	1938.41	0.00	1.84	41.2	1938.39	0.00	1.85	42.1
1938.37	0.00	1.85	43.0	1938.36	0.00	1.86	43.9	1938.34	0.00	1.86	44.8
1938.32	0.00	1.87	45.6	1938.29	0.00	1.88	46.5	1938.27	0.00	1.88	47.4
1938.25	0.00	1.88	48.2	1938.23	0.00	1.89	49.1	1938.21	0.00	1.89	50.0
1938.23	0.00	1.88	50.8	1938.25	0.00	1.86	51.7	1938.27	0.00	1.85	52.5
1938.29	0.00	1.84	53.3	1938.31	0.00	1.82	54.2	1938.33	0.00	1.81	55.0
1938.35	0.00	1.81	55.9	1938.37	0.00	1.80	56.8	1938.39	0.00	1.80	57.8
1938.41	0.00	1.80	58.7	1938.45	0.00	1.81	59.6	1938.50	0.00	1.84	60.5
1938.56	0.00	1.87	61.7	1938.73	0.00	2.03	62.7	1938.82	0.00	2.09	63.7
1938.84	0.00	2.09	64.7	1938.83	0.00	2.05	65.5	1938.82	0.00	2.03	66.4
1938.85	0.00	2.03	67.2	1938.85	0.00	1.90	67.8	1938.85	0.00	1.78	68.5
1938.85	0.00	1.65	69.4	1938.85	0.00	1.53	70.1	1938.82	0.00	1.48	70.9
1938.82	0.00	1.47	71.8	1938.86	0.00	1.49	72.7	1938.81	0.00	1.42	73.7
1938.86	0.00	1.45	74.5	1938.86	0.00	1.43	75.3	1938.88	0.01	1.43	76.6
1939.21	0.00	1.75	77.1	1939.32	0.00	1.84	77.8	1939.33	0.00	1.82	79.0
1939.61	0.00	0.00	80.0								

ID  
17 SECTION 171.00 TIME = 29.06 HRS WS =1935.58 WIDTH = 25.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1936.58	0.00	0.00	10.0	1936.20	0.00	0.44	10.9	1936.20	0.00	0.46	12.1
1936.19	0.00	0.47	13.0	1936.19	0.00	0.48	13.9	1936.19	0.00	0.49	14.8
1936.20	0.00	0.52	15.7	1936.19	0.00	0.53	16.7	1936.20	0.00	0.55	17.6
1936.19	0.00	0.56	18.6	1936.19	0.00	0.57	19.5	1936.19	0.00	0.59	20.5
1936.19	0.00	0.60	21.3	1936.19	0.00	0.62	22.1	1936.19	0.00	0.63	22.8
1936.20	0.00	0.65	23.7	1936.19	0.00	0.66	24.6	1936.19	0.00	0.67	25.5
1936.19	0.00	0.69	26.3	1936.19	0.00	0.71	27.4	1936.19	0.00	0.72	28.4
1936.18	0.00	0.81	29.2	1936.18	0.00	0.91	29.8	1936.17	0.00	1.00	31.4
1936.15	0.00	1.09	32.2	1936.16	0.00	1.19	33.0	1936.14	0.00	1.20	33.9
1935.88	0.00	0.97	34.7	1935.74	0.00	0.86	35.7	1935.68	0.00	0.83	36.6
1935.64	0.00	0.82	37.5	1935.43	0.00	0.64	38.4	1935.14	-0.03	0.38	39.3
1934.83	-0.05	0.10	40.2	1934.70	-0.05	0.00	41.1	1934.70	-0.05	0.02	42.0
1934.69	-0.05	0.04	42.9	1934.69	-0.05	0.07	43.8	1934.69	-0.05	0.09	44.7
1934.69	-0.05	0.11	45.6	1934.69	-0.05	0.13	46.4	1934.69	-0.05	0.15	47.3
1934.69	-0.06	0.17	48.2	1934.69	-0.06	0.20	49.1	1934.69	-0.06	0.21	50.0
1934.69	-0.06	0.18	50.8	1934.69	-0.06	0.15	51.7	1934.69	-0.05	0.12	52.5
1934.69	-0.05	0.09	53.3	1934.69	-0.05	0.05	54.2	1934.69	-0.05	0.02	55.0
1934.69	-0.05	0.00	55.9	1934.69	-0.05	-0.02	56.8	1934.69	-0.05	-0.05	57.8
1934.70	-0.05	-0.07	58.7	1934.78	-0.05	-0.01	59.6	1935.09	-0.04	0.28	60.5
1935.38	-0.02	0.54	61.5	1935.54	0.01	0.68	62.4	1935.63	0.00	0.75	63.3
1935.68	0.00	0.78	64.2	1935.84	0.00	0.91	65.2	1936.13	0.00	1.18	66.1
1936.14	0.00	1.17	67.0	1936.13	0.00	1.03	67.8	1936.12	0.00	0.90	69.3
1936.13	0.00	0.79	69.8	1936.14	0.00	0.67	70.7	1936.14	0.00	0.65	71.7
1936.14	0.00	0.62	72.6	1936.14	0.00	0.60	73.6	1936.16	0.00	0.59	74.3
1936.22	0.00	0.63	75.2	1936.24	0.00	0.62	75.9	1936.24	0.00	0.60	76.6
1936.24	0.00	0.57	77.5	1936.24	0.00	0.55	78.4	1936.24	0.00	0.52	79.3
1936.25	0.00	0.50	80.3	1936.25	0.00	0.48	81.2	1936.30	0.00	0.50	82.1
1936.30	0.00	0.48	83.0	1936.31	0.00	0.46	83.9	1936.58	0.00	0.00	85.0

## ID

16 SECTION 170.00 TIME = 29.06 HRS WS =1934.09 WIDTH = 50.3

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1934.70	0.00	0.00	10.0	1934.37	0.00	0.36	10.8	1934.32	0.00	0.32	12.0
1934.23	0.00	0.27	12.9	1934.24	0.00	0.29	13.8	1934.24	0.00	0.31	14.6
1934.23	0.00	0.32	15.7	1934.24	0.00	0.35	16.6	1934.23	0.00	0.36	17.6
1934.23	0.00	0.38	18.6	1934.23	0.00	0.40	19.4	1934.23	0.00	0.42	20.2
1934.23	0.00	0.44	20.9	1934.23	0.00	0.46	21.7	1934.24	0.00	0.49	22.9
1933.75	-0.06	0.02	23.7	1933.60	0.02	-0.11	24.6	1933.56	0.02	-0.13	25.6
1933.56	0.02	-0.11	26.6	1933.57	0.02	-0.08	27.4	1933.56	0.02	-0.07	28.4
1933.56	0.02	0.03	29.2	1933.57	0.02	0.14	30.6	1933.57	0.02	0.24	31.0
1933.56	0.02	0.33	32.3	1933.55	0.02	0.42	33.0	1933.56	0.02	0.46	33.7
1933.56	0.02	0.50	34.8	1933.57	0.02	0.54	35.7	1933.57	0.02	0.57	36.6
1933.56	0.02	0.60	37.4	1933.57	0.02	0.64	38.3	1933.57	0.02	0.68	39.2
1933.55	0.02	0.68	40.1	1933.52	0.02	0.69	41.0	1933.50	0.02	0.69	41.9
1933.47	0.02	0.68	42.8	1933.45	0.02	0.68	43.7	1933.45	0.02	0.70	44.6
1933.44	0.02	0.71	45.5	1933.43	0.02	0.72	46.4	1933.43	0.02	0.73	47.3
1933.42	0.02	0.75	48.2	1933.41	0.02	0.76	49.1	1933.40	0.02	0.77	50.0
1933.41	0.02	0.75	50.9	1933.42	0.02	0.73	51.7	1933.42	0.02	0.71	52.6
1933.43	0.02	0.69	53.4	1933.44	0.02	0.67	54.3	1933.44	0.02	0.64	55.1
1933.45	0.02	0.62	56.0	1933.46	0.02	0.61	56.9	1933.49	0.02	0.61	57.8
1933.52	0.02	0.61	58.8	1933.54	0.02	0.61	59.7	1933.57	0.02	0.61	60.6
1933.59	0.02	0.61	61.5	1933.61	0.02	0.61	62.4	1933.63	0.02	0.60	63.3
1933.68	0.01	0.62	64.3	1933.82	0.01	0.74	65.2	1933.82	0.01	0.71	66.1
1933.82	0.01	0.69	67.6	1933.82	0.01	0.49	68.3	1933.83	0.01	0.30	69.2
1933.82	0.01	0.09	70.1	1933.81	0.01	-0.11	70.9	1933.79	0.01	-0.13	72.0
1933.88	0.01	-0.04	72.7	1933.89	-0.06	-0.03	73.2	1934.35	0.00	0.44	74.1
1934.34	0.00	0.43	74.8	1934.34	0.00	0.44	75.7	1934.34	0.00	0.45	76.7
1934.34	0.00	0.45	77.6	1934.34	0.00	0.46	78.6	1934.34	0.00	0.46	79.5
1934.35	0.00	0.47	80.5	1934.36	0.00	0.49	81.5	1934.36	0.00	0.50	82.4
1934.36	0.00	0.50	83.3	1934.36	0.00	0.51	84.3	1934.37	0.00	0.52	85.2
1934.39	0.00	0.54	86.1	1934.40	0.00	0.56	87.0	1934.42	0.00	0.58	88.0
1934.42	0.00	0.59	88.9	1934.70	0.00	0.00	90.0				

## ID

15 SECTION 169.00 TIME = 29.06 HRS WS =1932.39 WIDTH = 46.8

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1932.89	0.00	0.00	10.0	1932.65	0.00	0.39	11.0	1932.65	0.00	0.41	11.6
1932.64	0.00	0.43	13.0	1932.64	0.00	0.45	13.9	1932.61	0.00	0.44	14.9
1932.57	0.00	0.43	15.7	1932.57	0.00	0.45	16.5	1932.57	0.00	0.47	17.3
1932.56	0.00	0.50	18.6	1932.56	0.00	0.52	19.3	1932.56	0.00	0.54	20.1
1932.55	0.00	0.56	21.3	1932.55	0.00	0.58	22.4	1932.55	0.00	0.61	23.1
1932.54	0.00	0.63	23.9	1932.54	0.00	0.65	24.9	1932.37	0.02	0.51	26.1
1932.09	0.00	0.25	26.7	1932.08	0.00	0.27	28.0	1932.07	0.00	0.28	29.0
1932.08	0.00	0.39	29.8	1932.07	0.00	0.48	30.4	1932.07	0.00	0.58	31.3
1932.07	0.00	0.68	32.1	1932.08	0.00	0.79	32.7	1932.08	0.00	0.82	33.9
1932.06	0.00	0.84	34.8	1932.07	0.00	0.88	35.7	1932.06	0.00	0.91	36.6
1932.04	0.00	0.91	37.4	1931.81	0.00	0.72	38.3	1931.80	0.00	0.74	39.2
1931.79	0.00	0.76	40.1	1931.78	0.00	0.79	41.0	1931.77	0.00	0.80	41.9
1931.76	0.00	0.81	42.8	1931.75	0.00	0.82	43.7	1931.74	0.00	0.83	44.6
1931.73	0.00	0.84	45.5	1931.72	0.00	0.85	46.4	1931.71	0.00	0.85	47.3
1931.70	0.00	0.87	48.2	1931.68	0.00	0.87	49.1	1931.67	0.00	0.88	50.0
1931.68	0.00	0.87	50.9	1931.69	0.00	0.85	51.7	1931.70	0.00	0.83	52.6
1931.72	0.00	0.81	53.4	1931.73	0.00	0.79	54.3	1931.74	0.00	0.77	55.1
1931.74	0.00	0.75	56.0	1931.75	0.00	0.74	56.9	1931.76	0.00	0.72	57.8
1931.77	0.00	0.71	58.8	1931.78	0.00	0.69	59.7	1931.80	0.00	0.68	60.6
1931.81	0.00	0.66	61.5	1932.00	0.00	0.83	62.4	1932.03	0.00	0.84	63.3
1932.04	0.00	0.82	64.3	1932.03	0.00	0.79	65.2	1932.11	0.00	0.84	66.3

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1932.20	0.00	0.91	67.0	1932.19	0.00	0.70	67.8	1932.19	0.00	0.50	68.7	
1932.19	0.00	0.30	69.5	1932.19	0.00	0.10	70.4	1932.23	0.00	0.13	71.6	
1932.26	0.02	0.15	72.0	1932.56	0.00	0.44	73.3	1932.59	0.00	0.46	74.3	
1932.59	0.00	0.46	74.8	1932.60	0.00	0.45	75.7	1932.60	0.00	0.44	76.7	
1932.60	0.00	0.43	77.6	1932.60	0.00	0.43	78.6	1932.60	0.00	0.41	79.5	
1932.60	0.00	0.41	80.5	1932.60	0.00	0.40	81.5	1932.62	0.00	0.40	82.4	
1932.64	0.00	0.42	83.3	1932.64	0.00	0.41	84.2	1932.64	0.00	0.40	85.2	
1932.64	0.00	0.39	86.1	1932.65	0.00	0.39	87.1	1932.65	0.00	0.38	88.0	
1932.65	0.00	0.37	88.9	1932.89	0.00	0.00	90.0					

ID  
14 SECTION 168.00 TIME = 29.06 HRS WS =1930.85 WIDTH = 62.4

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1931.23	0.00	0.00	10.0	1930.90	0.00	0.47	10.8	1930.88	0.00	0.48	12.0	
1930.85	0.01	0.47	12.8	1930.73	0.00	0.38	13.8	1930.71	0.00	0.39	14.7	
1930.70	0.00	0.40	15.7	1930.71	0.00	0.44	16.6	1930.70	0.00	0.45	17.3	
1930.70	0.00	0.47	18.2	1930.70	0.00	0.50	19.1	1930.70	0.00	0.52	20.4	
1930.70	0.00	0.55	21.4	1930.69	0.00	0.57	22.4	1930.69	0.00	0.59	23.3	
1930.69	0.00	0.61	24.2	1930.64	0.00	0.59	24.9	1930.60	0.00	0.58	25.7	
1930.61	0.00	0.61	26.7	1930.60	0.00	0.63	27.6	1930.60	0.00	0.65	28.6	
1930.59	0.00	0.74	29.3	1930.58	0.00	0.83	30.2	1930.57	0.00	0.92	31.0	
1930.58	0.00	1.02	31.9	1930.56	0.00	1.11	32.7	1930.56	0.00	1.15	33.9	
1930.55	0.00	1.18	34.8	1930.54	0.00	1.20	35.6	1930.45	0.00	1.15	36.5	
1930.42	0.00	1.16	37.4	1930.40	0.00	1.17	38.2	1930.37	0.00	1.18	39.1	
1930.34	0.00	1.19	40.0	1930.31	0.00	1.18	40.9	1930.28	0.00	1.17	41.8	
1930.25	0.00	1.15	42.7	1930.21	0.00	1.14	43.6	1930.18	0.00	1.12	44.5	
1930.14	0.00	1.10	45.5	1930.10	0.00	1.08	46.4	1930.07	0.00	1.06	47.3	
1930.03	0.00	1.05	48.2	1930.00	0.00	1.03	49.1	1929.96	0.00	1.01	50.0	
1929.99	0.00	1.02	50.9	1930.03	0.00	1.02	51.7	1930.06	0.00	1.03	52.6	
1930.09	0.00	1.03	53.4	1930.13	0.00	1.04	54.3	1930.16	0.00	1.04	55.1	
1930.20	0.00	1.05	56.0	1930.24	0.00	1.06	56.9	1930.27	0.00	1.07	57.8	
1930.30	0.00	1.08	58.8	1930.33	0.00	1.08	59.7	1930.36	0.00	1.09	60.6	
1930.39	0.00	1.09	61.5	1930.42	0.00	1.09	62.4	1930.45	0.00	1.10	63.3	
1930.55	0.00	1.18	64.3	1930.59	0.00	1.19	65.2	1930.60	0.00	1.17	66.1	
1930.60	0.00	1.15	67.3	1930.60	0.00	0.95	68.1	1930.61	0.00	0.76	69.0	
1930.61	0.00	0.56	70.0	1930.62	0.00	0.37	70.9	1930.62	0.00	0.36	71.7	
1930.62	0.00	0.35	72.5	1930.62	0.00	0.34	73.4	1930.64	0.00	0.35	74.1	
1930.85	0.00	0.55	74.9	1930.88	0.00	0.58	75.8	1930.86	0.00	0.55	76.7	
1930.89	0.00	0.56	77.6	1930.89	0.00	0.55	78.6	1930.88	0.00	0.54	79.5	
1930.86	0.00	0.51	80.5	1930.88	0.00	0.51	81.4	1930.90	0.00	0.52	82.4	
1930.88	0.00	0.50	83.3	1930.88	0.00	0.49	84.3	1930.89	0.00	0.49	85.3	
1930.94	0.00	0.53	86.1	1930.97	0.00	0.54	87.0	1930.98	0.00	0.55	88.0	
1930.99	0.00	0.55	88.8	1931.23	0.00	0.00	90.0					

ID  
13 SECTION 167.00 TIME = 29.06 HRS WS =1927.85 WIDTH = 20.0

	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1929.57	0.00	0.00	10.0	1929.32	0.00	0.74	10.8	1929.31	0.00	0.75	12.0	
1929.30	0.00	0.77	12.6	1929.29	0.00	0.78	13.6	1929.27	0.00	0.78	14.9	
1929.20	0.00	0.74	15.8	1929.11	0.00	0.68	16.7	1929.12	0.00	0.71	17.6	
1929.09	0.00	0.71	18.5	1929.09	0.00	0.73	19.4	1929.11	0.00	0.78	20.3	
1929.11	0.00	0.80	21.4	1929.11	0.00	0.83	22.4	1929.08	0.00	0.82	23.3	
1929.10	0.00	0.87	24.3	1929.10	0.00	0.89	25.2	1929.10	0.00	0.92	26.2	
1929.08	0.00	0.93	27.1	1929.07	0.00	0.93	28.1	1929.10	0.00	0.99	29.0	
1929.09	0.00	1.08	29.8	1929.07	0.00	1.16	30.6	1929.04	0.00	1.23	31.4	
1929.03	0.00	1.32	32.2	1929.03	0.00	1.42	33.0	1929.00	0.00	1.43	33.9	
1928.97	0.00	1.45	34.7	1929.00	0.00	1.52	35.6	1928.92	0.00	1.49	36.4	
1928.92	0.00	1.53	37.3	1928.44	0.00	1.08	38.2	1928.12	0.00	0.81	38.6	

1928.01	-0.03	0.72	39.9	1927.39	-0.01	0.11	40.8	1926.90	0.00	-0.36	41.8
1926.90	0.01	-0.35	42.7	1926.90	0.01	-0.33	43.6	1926.90	0.01	-0.32	44.5
1926.90	0.01	-0.30	45.4	1926.90	0.01	-0.28	46.3	1926.90	0.01	-0.26	47.3
1926.90	0.01	-0.25	48.2	1926.90	0.01	-0.23	49.1	1926.90	0.01	-0.22	50.0
1926.90	0.01	-0.24	50.9	1926.90	0.01	-0.26	51.8	1926.90	0.01	-0.28	52.7
1926.90	0.01	-0.30	53.6	1926.90	0.01	-0.33	54.4	1926.90	0.01	-0.35	55.3
1926.90	0.01	-0.37	56.2	1926.90	0.01	-0.39	57.1	1926.90	0.00	-0.41	58.0
1927.17	0.00	-0.17	58.9	1927.74	-0.04	0.37	59.8	1928.01	0.00	0.61	61.1
1928.33	0.00	0.90	61.6	1928.97	0.00	1.51	62.5	1929.08	0.00	1.59	63.4
1929.19	0.00	1.67	64.3	1929.21	0.00	1.66	65.2	1929.20	0.00	1.62	66.1
1929.22	0.00	1.61	67.0	1929.27	0.00	1.46	67.8	1929.25	0.00	1.24	68.5
1929.26	0.00	1.05	69.4	1929.26	0.00	0.85	70.0	1929.26	0.00	0.84	70.9
1929.27	0.00	0.84	71.9	1929.28	0.00	0.84	72.8	1929.28	0.00	0.83	73.8
1929.28	0.00	0.82	74.8	1929.29	0.00	0.82	75.7	1929.30	0.00	0.82	76.6
1929.30	0.00	0.81	77.6	1929.30	0.00	0.81	78.5	1929.30	0.00	0.80	79.9
1929.31	0.00	0.79	80.5	1929.31	0.00	0.78	81.4	1929.31	0.00	0.78	82.3
1929.31	0.00	0.77	83.2	1929.32	0.00	0.77	84.7	1929.32	0.00	0.76	85.2
1929.33	0.00	0.76	86.2	1929.33	0.00	0.75	87.0	1929.34	0.00	0.75	88.0
1929.34	0.00	0.74	88.8	1929.57	0.00	0.00	90.0				

ID  
12 SECTION 166.00 TIME = 29.06 HRS WS =1924.55 WIDTH = 40.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1927.53	0.00	0.00	10.0	1927.22	0.00	0.01	10.9	1927.20	0.00	0.04	11.9
1927.15	0.00	0.04	12.9	1927.12	0.00	0.06	13.8	1927.11	0.00	0.10	14.7
1927.12	0.00	0.16	15.7	1927.13	0.00	0.22	16.7	1927.11	0.00	0.25	17.6
1927.09	0.00	0.28	18.6	1927.08	0.00	0.32	19.5	1927.07	0.00	0.36	20.5
1927.04	0.00	0.38	21.3	1927.04	0.00	0.43	22.3	1927.04	0.00	0.48	23.3
1927.04	0.00	0.53	24.3	1927.04	0.00	0.58	25.2	1926.96	0.00	0.55	26.2
1926.26	-0.01	-0.10	27.1	1925.56	-0.01	-0.75	28.1	1924.84	-0.01	-1.42	29.0
1924.49	0.01	-1.68	29.5	1924.37	0.01	-1.68	30.1	1924.37	0.01	-1.60	30.3
1924.29	0.01	-1.57	30.5	1924.26	0.01	-1.50	33.0	1924.24	0.01	-1.47	33.9
1924.22	0.01	-1.46	34.7	1924.19	0.01	-1.44	35.6	1924.16	0.01	-1.43	36.4
1924.13	0.01	-1.42	37.3	1924.09	0.01	-1.41	38.1	1924.05	0.01	-1.41	39.0
1923.99	0.01	-1.45	39.9	1923.93	0.01	-1.50	40.8	1923.87	0.01	-1.54	41.8
1923.79	0.01	-1.60	42.7	1923.78	0.02	-1.60	43.6	1923.77	0.02	-1.59	44.5
1923.76	0.02	-1.58	45.4	1923.75	0.02	-1.57	46.3	1923.74	0.02	-1.57	47.3
1923.74	0.02	-1.56	48.2	1923.73	0.02	-1.55	49.1	1923.72	0.02	-1.54	50.0
1923.73	0.02	-1.55	50.9	1923.74	0.02	-1.56	51.8	1923.74	0.02	-1.58	52.7
1923.75	0.02	-1.59	53.6	1923.76	0.02	-1.60	54.5	1923.77	0.02	-1.61	55.4
1923.78	0.02	-1.62	56.3	1923.79	0.01	-1.64	57.2	1923.79	0.01	-1.65	58.1
1923.83	0.01	-1.63	59.0	1923.88	0.01	-1.61	59.9	1923.94	0.01	-1.59	60.8
1923.99	0.01	-1.57	61.7	1924.03	0.01	-1.56	62.6	1924.00	0.01	-1.63	63.4
1924.04	0.01	-1.62	64.3	1924.08	0.01	-1.61	65.2	1924.11	0.01	-1.62	66.1
1924.22	0.01	-1.54	67.9	1924.25	0.01	-1.64	68.8	1924.29	0.01	-1.72	69.0
1924.35	0.01	-1.78	69.6	1924.66	-0.01	-1.60	70.0	1925.36	0.00	-0.92	71.0
1926.06	0.00	-0.25	71.9	1926.75	0.00	0.42	72.9	1926.99	0.00	0.63	73.8
1927.00	0.00	0.62	74.8	1927.02	0.00	0.62	75.7	1927.03	0.00	0.61	76.7
1927.05	0.00	0.60	77.6	1927.03	0.00	0.56	78.6	1927.05	0.00	0.55	79.5
1927.04	0.00	0.52	80.5	1927.05	0.00	0.50	81.4	1927.08	0.00	0.51	82.4
1927.08	0.00	0.49	83.3	1927.10	0.00	0.49	84.3	1927.11	0.00	0.47	85.3
1927.14	0.00	0.47	86.2	1927.15	0.00	0.46	87.1	1927.17	0.00	0.46	88.0
1927.26	0.00	0.52	88.9	1927.53	0.00	0.00	90.0				

ID  
11 SECTION 165.00 TIME = 29.06 HRS WS =1923.01 WIDTH = 43.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1925.42	0.00	0.00	10.0	1925.40	0.00	0.00	10.9	1925.37	0.00	0.00	11.9
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1925.34	0.00	0.00	12.8	1925.32	0.00	0.00	13.8	1925.29	0.00	0.00	14.7
1925.27	0.00	0.00	15.7	1925.24	0.00	0.00	16.6	1925.22	0.00	0.00	17.6
1925.19	0.00	0.00	18.6	1925.17	0.00	0.00	19.5	1925.14	0.00	0.00	20.5
1925.12	0.00	0.00	21.4	1925.09	0.00	0.00	22.4	1925.07	0.00	0.00	23.3
1925.04	0.00	0.00	24.3	1925.02	0.00	0.00	25.2	1924.65	0.00	-0.34	26.2
1923.96	0.00	-1.01	27.1	1923.37	0.00	-1.58	27.9	1923.20	0.00	-1.72	28.1
1923.05	0.00	-1.67	28.3	1922.95	0.00	-1.57	28.7	1922.84	0.00	-1.48	30.5
1922.80	0.00	-1.32	31.8	1922.76	0.00	-1.16	33.0	1922.73	0.00	-1.14	33.8
1922.70	0.00	-1.12	34.7	1922.66	0.00	-1.11	35.5	1922.62	0.00	-1.10	36.3
1922.58	-0.01	-1.09	37.2	1922.53	-0.01	-1.09	38.0	1922.47	-0.01	-1.14	38.9
1922.41	-0.01	-1.18	39.8	1922.35	-0.01	-1.23	40.8	1922.28	-0.01	-1.28	41.7
1922.22	-0.01	-1.32	42.6	1922.20	-0.01	-1.32	43.5	1922.19	-0.01	-1.32	44.5
1922.18	-0.01	-1.31	45.4	1922.17	-0.01	-1.31	46.3	1922.16	-0.01	-1.30	47.2
1922.15	-0.02	-1.30	48.2	1922.14	-0.02	-1.30	49.1	1922.13	-0.02	-1.29	50.0
1922.14	-0.02	-1.30	50.9	1922.15	-0.02	-1.31	51.8	1922.16	-0.01	-1.32	52.7
1922.17	-0.01	-1.33	53.6	1922.18	-0.01	-1.34	54.5	1922.19	-0.01	-1.35	55.4
1922.20	-0.01	-1.36	56.3	1922.22	-0.01	-1.37	57.2	1922.27	-0.01	-1.33	58.1
1922.33	-0.01	-1.29	59.0	1922.40	-0.01	-1.25	59.9	1922.48	-0.01	-1.20	60.8
1922.55	-0.01	-1.17	61.7	1922.62	-0.01	-1.13	62.6	1922.68	0.00	-1.11	63.4
1922.73	0.00	-1.09	64.3	1922.77	0.00	-1.08	65.2	1922.78	0.00	-1.10	66.1
1922.78	0.00	-1.14	67.0	1922.80	0.00	-1.25	68.0	1922.78	0.00	-1.39	69.0
1922.80	0.00	-1.50	69.8	1922.78	0.00	-1.64	70.9	1922.83	0.00	-1.61	72.0
1923.16	0.00	-1.31	72.5	1923.76	0.00	-0.73	73.5	1923.77	0.00	-0.74	74.4
1923.77	0.00	-0.77	75.1	1923.86	0.00	-0.70	76.4	1924.00	0.00	-0.59	76.7
1924.52	0.00	-0.09	77.7	1924.59	0.00	-0.04	78.6	1924.66	0.00	0.00	79.5
1924.68	0.00	0.00	80.5	1924.71	0.00	0.00	81.4	1924.73	0.00	0.00	82.4
1924.75	0.00	0.00	83.3	1924.78	0.00	0.00	84.3	1924.80	0.00	0.00	85.2
1924.82	0.00	0.00	86.2	1924.85	0.00	0.00	87.1	1924.87	0.00	0.00	88.1
1924.90	0.00	0.00	89.0	1924.95	0.00	0.00	90.0				

## ID

10 SECTION 164.00 TIME = 29.06 HRS WS = 1921.79 WIDTH = 43.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1924.08	0.00	0.00	10.0	1924.06	0.00	0.00	10.9	1924.05	0.00	0.00	11.9
1924.03	0.00	0.00	12.8	1924.02	0.00	0.00	13.8	1924.00	0.00	0.00	14.7
1923.99	0.00	0.00	15.7	1923.97	0.00	0.00	16.6	1923.96	0.00	0.00	17.6
1923.94	0.00	0.00	18.6	1923.93	0.00	0.00	19.5	1923.91	0.00	0.00	20.5
1923.90	0.00	0.00	21.4	1923.88	0.00	0.00	22.4	1923.87	0.00	0.00	23.3
1923.85	0.00	0.00	24.3	1923.84	0.00	0.00	25.2	1923.18	0.00	-0.64	26.2
1922.49	0.00	-1.32	27.1	1921.83	0.00	-1.96	28.0	1921.73	0.00	-2.05	28.2
1921.62	0.00	-1.82	29.3	1921.62	0.00	-1.48	29.8	1921.61	0.00	-1.15	30.4
1921.61	0.00	-0.81	32.2	1921.62	0.00	-0.45	33.0	1921.63	0.00	-0.40	33.8
1921.58	0.00	-0.40	34.7	1921.52	0.00	-0.41	35.5	1921.45	0.00	-0.43	36.3
1921.37	0.00	-0.46	37.2	1921.28	0.00	-0.50	38.0	1921.17	0.00	-0.60	38.9
1921.10	0.00	-0.65	39.8	1921.06	0.00	-0.67	40.8	1921.03	0.00	-0.69	41.7
1921.01	0.00	-0.69	42.6	1921.00	0.00	-0.68	43.5	1921.00	0.00	-0.67	44.5
1921.00	0.00	-0.65	45.4	1921.00	0.00	-0.64	46.3	1921.00	0.00	-0.63	47.2
1921.00	0.00	-0.61	48.2	1921.00	0.00	-0.60	49.1	1921.00	0.00	-0.58	50.0
1921.00	0.00	-0.60	50.9	1921.00	0.00	-0.62	51.8	1921.00	0.00	-0.63	52.7
1921.00	0.00	-0.65	53.6	1921.00	0.00	-0.67	54.5	1921.00	0.00	-0.69	55.5
1921.00	0.00	-0.70	56.4	1921.01	0.00	-0.71	57.3	1921.03	0.00	-0.72	58.2
1921.05	0.00	-0.71	59.1	1921.09	0.00	-0.69	60.0	1921.14	0.00	-0.68	60.9
1921.25	0.00	-0.60	61.8	1921.35	0.00	-0.55	62.6	1921.43	0.00	-0.50	63.5
1921.51	0.00	-0.46	64.4	1921.48	0.00	-0.52	65.2	1921.50	0.00	-0.54	66.1
1921.50	0.00	-0.58	67.0	1921.52	0.00	-0.94	67.7	1921.50	0.00	-1.33	69.6
1921.50	0.00	-1.71	70.2	1921.59	0.00	-1.99	71.4	1921.81	0.00	-1.79	71.7
1921.96	0.00	-1.67	71.9	1922.63	0.00	-1.02	72.9	1923.33	0.00	-0.35	73.8
1923.70	0.00	0.00	74.8	1923.72	0.00	0.00	75.7	1923.75	0.00	0.00	76.7
1923.77	0.00	0.00	77.6	1923.79	0.00	0.00	78.6	1923.82	0.00	0.00	79.5
1923.84	0.00	0.00	80.5	1923.87	0.00	0.00	81.4	1923.89	0.00	0.00	82.4

1923.91	0.00	0.00	83.3	1923.94	0.00	0.00	84.3	1923.96	0.00	0.00	85.2
1923.98	0.00	0.00	86.2	1924.01	0.00	0.00	87.1	1924.03	0.00	0.00	88.1
1924.06	0.00	0.00	89.0	1924.08	0.00	0.00	90.0				

## ID

9 SECTION 163.00 TIME = 29.06 HRS WS =1920.69 WIDTH = 46.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1922.74	0.00	0.00	10.0	1922.69	0.00	0.00	10.9	1922.64	0.00	0.00	11.9
1922.59	0.00	0.00	12.8	1922.54	0.00	0.00	13.8	1922.49	0.00	0.00	14.7
1922.44	0.00	0.00	15.7	1922.39	0.00	0.00	16.6	1922.34	0.00	0.00	17.6
1922.29	0.00	0.00	18.6	1922.24	0.00	0.00	19.5	1922.19	0.00	0.00	20.5
1922.14	0.00	0.00	21.4	1922.09	0.00	0.00	22.4	1922.02	0.00	-0.02	23.3
1921.33	0.00	-0.66	24.3	1920.88	-0.01	-1.06	24.9	1920.53	-0.01	-1.36	25.3
1920.47	0.00	-1.37	25.9	1920.42	0.00	-1.37	27.1	1920.42	0.00	-1.32	28.2
1920.42	0.00	-1.02	28.9	1920.42	0.00	-0.72	30.0	1920.42	0.00	-0.42	31.2
1920.41	0.00	-0.13	32.2	1920.41	0.00	0.17	33.0	1920.40	0.00	0.21	33.8
1920.40	0.00	0.26	34.7	1920.41	0.00	0.32	35.5	1920.32	0.00	0.28	36.3
1920.28	0.00	0.29	37.2	1920.24	0.00	0.30	38.0	1920.19	0.00	0.27	38.9
1920.14	0.00	0.23	39.8	1920.08	0.00	0.19	40.8	1920.05	0.00	0.17	41.7
1920.02	0.00	0.16	42.6	1919.99	0.00	0.14	43.5	1919.96	0.00	0.12	44.5
1919.93	0.00	0.11	45.4	1919.89	0.00	0.09	46.3	1919.86	0.00	0.07	47.2
1919.86	0.00	0.09	48.2	1919.86	0.00	0.10	49.1	1919.85	0.00	0.11	50.0
1919.86	0.00	0.10	50.9	1919.86	0.00	0.08	51.8	1919.86	0.00	0.06	52.7
1919.89	0.00	0.08	53.6	1919.92	0.00	0.09	54.5	1919.95	0.00	0.11	55.5
1919.98	0.00	0.12	56.4	1920.01	0.00	0.13	57.3	1920.04	0.00	0.14	58.2
1920.07	0.00	0.15	59.1	1920.13	0.00	0.19	60.0	1920.18	0.00	0.20	60.9
1920.23	0.00	0.22	61.8	1920.27	0.00	0.22	62.6	1920.28	0.00	0.19	63.5
1920.28	0.00	0.15	64.4	1920.29	0.00	0.13	65.2	1920.29	0.00	0.09	66.1
1920.28	0.00	0.04	67.0	1920.29	0.00	-0.45	68.4	1920.28	0.00	-0.96	69.5
1920.30	0.00	-1.44	70.0	1920.36	0.00	-1.88	71.1	1920.68	0.00	-1.58	71.8
1920.96	-0.01	-1.33	72.2	1921.45	-0.01	-0.86	72.9	1922.14	-0.01	-0.20	73.8
1922.36	0.00	0.00	74.8	1922.38	0.00	0.00	75.7	1922.41	0.00	0.00	76.7
1922.43	0.00	0.00	77.6	1922.45	0.00	0.00	78.6	1922.48	0.00	0.00	79.5
1922.50	0.00	0.00	80.5	1922.53	0.00	0.00	81.4	1922.55	0.00	0.00	82.4
1922.57	0.00	0.00	83.3	1922.60	0.00	0.00	84.3	1922.62	0.00	0.00	85.2
1922.64	0.00	0.00	86.2	1922.67	0.00	0.00	87.1	1922.69	0.00	0.00	88.1
1922.72	0.00	0.00	89.0	1922.74	0.00	0.00	90.0				

## ID

8 SECTION 162.00 TIME = 29.06 HRS WS =1918.69 WIDTH = 43.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1920.39	0.00	0.00	10.0	1920.38	0.00	0.00	10.9	1920.37	0.00	0.00	11.9
1920.36	0.00	0.00	12.8	1920.35	0.00	0.00	13.8	1920.34	0.00	0.00	14.7
1920.33	0.00	0.00	15.7	1920.32	0.00	0.00	16.6	1920.31	0.00	0.00	17.6
1920.30	0.00	0.00	18.6	1920.29	0.00	0.00	19.5	1920.28	0.00	0.00	20.5
1920.27	0.00	0.00	21.4	1920.26	0.00	0.00	22.4	1920.25	0.00	0.00	23.3
1920.24	0.00	0.00	24.3	1919.87	0.00	-0.36	25.2	1919.18	0.00	-1.04	26.2
1918.84	0.00	-1.37	26.6	1918.68	0.00	-1.52	26.9	1918.60	0.00	-1.59	27.5
1918.54	0.00	-1.29	28.8	1918.55	0.00	-0.92	29.9	1918.54	0.00	-0.58	30.5
1918.53	0.00	-0.23	32.1	1918.52	0.00	0.13	33.0	1918.52	0.00	0.19	33.8
1918.52	0.00	0.25	34.6	1918.44	0.00	0.23	35.4	1918.35	0.00	0.20	36.2
1918.25	0.00	0.16	37.0	1918.11	0.00	0.04	37.9	1918.02	0.00	-0.04	38.9
1918.00	0.00	-0.05	39.8	1917.97	0.00	-0.06	40.7	1917.95	0.00	-0.07	41.6
1917.93	0.00	-0.08	42.6	1917.91	0.00	-0.08	43.5	1917.91	0.00	-0.07	44.4
1917.90	0.00	-0.06	45.4	1917.89	0.00	-0.06	46.3	1917.88	0.00	-0.05	47.2
1917.87	0.00	-0.05	48.1	1917.86	0.00	-0.04	49.1	1917.85	0.00	-0.04	50.0
1917.86	0.00	-0.05	50.9	1917.87	0.00	-0.06	51.8	1917.88	0.00	-0.07	52.7
1917.89	0.00	-0.08	53.6	1917.90	0.00	-0.08	54.5	1917.90	0.00	-0.09	55.5

1917.91	0.00	-0.11	56.4	1917.92	0.00	-0.11	57.3	1917.94	0.00	-0.11	58.2
1917.97	0.00	-0.10	59.1	1917.99	0.00	-0.10	60.0	1918.01	0.00	-0.12	60.9
1918.06	0.00	-0.10	61.8	1918.20	0.00	0.00	62.6	1918.32	0.00	0.08	63.5
1918.39	0.00	0.11	64.4	1918.38	0.00	0.07	65.2	1918.38	0.00	0.03	66.1
1918.39	0.00	0.01	67.4	1918.38	0.00	-0.63	68.6	1918.42	0.00	-1.22	69.9
1918.73	0.00	-1.53	70.4	1918.88	0.00	-2.01	70.6	1919.17	0.00	-1.74	71.0
1919.87	0.00	-1.07	71.9	1920.56	0.00	-0.40	72.9	1920.99	0.00	0.00	73.8
1921.01	0.00	0.00	74.8	1921.03	0.00	0.00	75.7	1921.06	0.00	0.00	76.7
1921.08	0.00	0.00	77.6	1921.10	0.00	0.00	78.6	1921.13	0.00	0.00	79.5
1921.15	0.00	0.00	80.5	1921.18	0.00	0.00	81.4	1921.20	0.00	0.00	82.4
1921.22	0.00	0.00	83.3	1921.25	0.00	0.00	84.3	1921.27	0.00	0.00	85.2
1921.29	0.00	0.00	86.2	1921.32	0.00	0.00	87.1	1921.34	0.00	0.00	88.1
1921.37	0.00	0.00	89.0	1921.39	0.00	0.00	90.0				

ID  
7 SECTION 161.00 TIME = 29.06 HRS WS =1917.45 WIDTH = 47.3

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1918.06	0.00	0.00	10.0	1918.08	0.00	0.00	10.9	1918.10	0.00	0.00	11.9
1918.13	0.00	0.00	12.8	1918.15	0.00	0.00	13.8	1918.18	0.00	0.00	14.7
1918.20	0.00	0.00	15.7	1918.23	0.00	0.00	16.6	1918.25	0.00	0.00	17.6
1918.28	0.00	0.00	18.6	1918.30	0.00	0.00	19.5	1918.33	0.00	0.00	20.5
1918.35	0.00	0.00	21.4	1918.38	0.00	0.00	22.4	1917.74	0.00	-0.66	23.3
1917.65	0.00	-0.78	23.6	1917.40	0.00	-1.05	24.4	1917.36	0.00	-1.11	25.1
1917.23	0.00	-1.27	26.4	1917.22	0.00	-1.31	27.5	1917.21	0.00	-1.34	28.3
1917.24	0.00	-0.91	29.3	1917.24	0.00	-0.51	30.1	1917.20	0.00	-0.15	31.0
1917.19	0.00	0.24	32.2	1917.19	0.00	0.64	33.0	1917.18	0.00	0.69	33.8
1917.21	0.00	0.78	34.6	1917.17	0.00	0.80	35.4	1917.21	0.00	0.90	36.2
1917.12	0.00	0.87	37.0	1916.98	0.00	0.74	37.9	1916.91	0.00	0.69	38.9
1916.84	0.00	0.64	39.8	1916.77	-0.01	0.58	40.7	1916.70	-0.01	0.52	41.6
1916.67	-0.01	0.50	42.6	1916.64	-0.01	0.49	43.5	1916.60	-0.01	0.47	44.4
1916.57	-0.01	0.45	45.4	1916.54	-0.01	0.44	46.3	1916.54	-0.01	0.44	47.2
1916.53	-0.01	0.45	48.1	1916.52	-0.01	0.46	49.1	1916.52	-0.01	0.47	50.0
1916.52	-0.01	0.46	50.9	1916.53	-0.01	0.45	51.8	1916.54	-0.01	0.44	52.8
1916.54	-0.01	0.43	53.7	1916.57	-0.01	0.43	54.6	1916.60	-0.01	0.45	55.5
1916.63	-0.01	0.47	56.4	1916.66	-0.01	0.48	57.3	1916.69	-0.01	0.49	58.3
1916.76	-0.01	0.54	59.2	1916.83	0.00	0.60	60.1	1916.90	0.00	0.65	61.0
1916.96	0.00	0.67	61.9	1917.05	0.00	0.72	62.7	1917.23	0.00	0.85	63.6
1917.36	0.00	0.94	64.4	1917.39	0.00	0.92	65.3	1917.37	0.00	0.86	66.1
1917.37	0.00	0.82	66.9	1917.38	0.00	0.20	68.3	1917.37	0.00	-0.43	69.2
1917.39	0.00	-1.04	70.0	1917.42	0.00	-1.63	71.5	1917.57	0.00	-1.53	71.7
1917.72	0.00	-1.43	71.9	1918.41	0.00	-0.78	72.9	1919.10	0.00	-0.14	73.8
1919.29	0.00	0.00	74.8	1919.34	0.00	0.00	75.7	1919.38	0.00	0.00	76.7
1919.43	0.00	0.00	77.6	1919.48	0.00	0.00	78.6	1919.53	0.00	0.00	79.5
1919.57	0.00	0.00	80.5	1919.62	0.00	0.00	81.4	1919.67	0.00	0.00	82.4
1919.72	0.00	0.00	83.3	1919.76	0.00	0.00	84.3	1919.81	0.00	0.00	85.2
1919.86	0.00	0.00	86.2	1919.91	0.00	0.00	87.1	1919.95	0.00	0.00	88.1
1920.00	0.00	0.00	89.0	1920.05	0.00	0.00	90.0				

ID  
6 SECTION 160.00 TIME = 29.06 HRS WS =1915.55 WIDTH = 46.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1916.21	0.00	0.00	10.0	1916.18	0.00	0.00	10.9	1916.16	0.00	0.00	11.9
1916.13	0.00	0.00	12.8	1916.11	0.00	0.00	13.8	1916.08	0.00	0.00	14.7
1916.06	0.00	0.00	15.7	1916.03	0.00	0.00	16.6	1916.01	0.00	0.00	17.6
1916.00	0.00	0.02	18.6	1915.96	0.00	0.00	19.5	1915.95	0.00	0.02	20.5
1915.95	0.00	0.04	21.4	1915.90	0.00	0.02	22.3	1915.88	0.00	0.02	23.3
1915.86	0.00	0.02	24.3	1915.85	0.00	0.04	25.2	1915.60	0.00	-0.19	26.1
1915.56	0.00	-0.20	26.5	1915.49	0.00	-0.25	27.6	1915.48	0.00	-0.23	28.4

1915.47	0.00	-0.04	29.5	1915.47	0.00	0.16	30.5	1915.47	0.00	0.36	31.4
1915.46	0.00	0.55	32.2	1915.47	0.00	0.76	33.0	1915.44	0.00	0.81	33.8
1915.38	0.00	0.82	34.5	1915.32	0.00	0.83	35.2	1915.25	0.00	0.84	36.0
1915.15	0.00	0.75	36.9	1915.04	0.00	0.65	37.9	1914.90	0.00	0.53	38.8
1914.85	0.00	0.50	39.7	1914.81	0.00	0.46	40.7	1914.78	0.00	0.45	41.6
1914.75	0.00	0.44	42.5	1914.73	0.01	0.43	43.5	1914.70	0.01	0.41	44.4
1914.68	0.01	0.40	45.3	1914.66	0.01	0.39	46.3	1914.65	0.01	0.40	47.2
1914.65	0.01	0.41	48.1	1914.64	0.01	0.42	49.1	1914.64	0.01	0.43	50.0
1914.64	0.01	0.42	50.9	1914.65	0.01	0.41	51.8	1914.65	0.01	0.40	52.8
1914.66	0.01	0.39	53.7	1914.68	0.01	0.39	54.6	1914.70	0.01	0.40	55.5
1914.73	0.01	0.41	56.5	1914.75	0.00	0.42	57.4	1914.78	0.00	0.43	58.3
1914.80	0.00	0.44	59.2	1914.85	0.00	0.47	60.2	1914.89	0.00	0.49	61.1
1915.02	0.00	0.61	62.0	1915.12	0.00	0.66	62.8	1915.21	0.00	0.70	63.7
1915.30	0.00	0.74	64.5	1915.37	0.00	0.76	65.3	1915.43	0.00	0.77	66.2
1915.48	0.00	0.77	67.0	1915.47	0.00	0.51	67.8	1915.47	0.00	0.26	68.5
1915.47	0.00	0.01	69.6	1915.47	0.00	-0.24	70.5	1915.47	0.00	-0.26	71.4
1915.53	0.00	-0.23	72.5	1915.60	0.00	-0.18	72.9	1915.85	0.00	0.04	73.8
1915.85	0.00	0.02	74.7	1915.87	0.00	0.02	75.7	1915.88	0.00	0.00	76.6
1915.90	0.00	0.00	77.6	1915.95	0.00	0.02	78.6	1915.95	0.00	0.00	79.5
1915.97	0.00	0.00	80.5	1916.01	0.00	0.01	81.4	1916.02	0.00	0.00	82.4
1916.04	0.00	0.00	83.3	1916.07	0.00	0.00	84.3	1916.09	0.00	0.00	85.2
1916.11	0.00	0.00	86.2	1916.14	0.00	0.00	87.1	1916.16	0.00	0.00	88.1
1916.19	0.00	0.00	89.0	1916.21	0.00	0.00	90.0				

ID  
5 SECTION 159.00 TIME = 29.06 HRS WS =1912.25 WIDTH = 40.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1914.87	0.00	0.00	10.0	1914.84	0.00	0.00	10.9	1914.82	0.00	0.00	11.9
1914.79	0.00	0.00	12.8	1914.77	0.00	0.00	13.8	1914.74	0.00	0.00	14.7
1914.72	0.00	0.00	15.7	1914.69	0.00	0.00	16.6	1914.67	0.00	0.00	17.6
1914.64	0.00	0.00	18.6	1914.62	0.00	0.00	19.5	1914.59	0.00	0.00	20.5
1914.57	0.00	0.00	21.4	1914.54	0.00	0.00	22.4	1914.52	0.00	0.00	23.3
1914.49	0.00	0.00	24.3	1914.47	0.00	0.00	25.2	1914.44	0.00	0.00	26.2
1913.89	0.00	-0.53	27.1	1913.20	0.00	-1.19	28.1	1912.52	0.00	-1.85	29.0
1912.37	0.00	-1.70	29.2	1912.25	0.00	-1.52	29.4	1912.22	0.00	-1.25	30.6
1912.20	0.00	-0.97	32.2	1912.20	0.00	-0.67	33.0	1912.13	0.00	-0.67	33.8
1912.05	0.00	-0.68	34.5	1911.94	0.00	-0.70	35.2	1911.83	0.00	-0.74	36.0
1911.72	0.00	-0.84	36.9	1911.67	0.00	-0.88	37.9	1911.61	0.00	-0.92	38.8
1911.55	0.00	-0.97	39.7	1911.50	0.00	-1.00	40.7	1911.48	0.00	-1.01	41.6
1911.47	0.00	-1.00	42.5	1911.47	-0.01	-1.00	43.5	1911.46	-0.01	-0.99	44.4
1911.45	-0.01	-0.99	45.3	1911.44	-0.01	-0.98	46.3	1911.44	-0.01	-0.97	47.2
1911.43	-0.01	-0.97	48.1	1911.42	-0.01	-0.96	49.1	1911.42	-0.01	-0.95	50.0
1911.42	-0.01	-0.96	50.9	1911.43	-0.01	-0.97	51.9	1911.44	-0.01	-0.97	52.8
1911.44	-0.01	-0.98	53.7	1911.45	-0.01	-0.99	54.6	1911.46	-0.01	-1.00	55.6
1911.47	-0.01	-1.01	56.5	1911.47	0.00	-1.01	57.4	1911.48	0.00	-1.02	58.4
1911.50	0.00	-1.01	59.3	1911.55	0.00	-0.98	60.2	1911.61	0.00	-0.93	61.1
1911.66	0.00	-0.89	62.1	1911.72	0.00	-0.85	63.0	1911.80	0.00	-0.83	63.8
1911.92	0.00	-0.77	64.6	1912.03	0.00	-0.72	65.4	1912.12	0.00	-0.69	66.2
1912.15	0.00	-0.72	67.0	1912.14	0.00	-1.10	68.2	1912.24	0.00	-1.38	70.1
1912.36	0.00	-1.63	70.4	1912.51	0.00	-1.86	70.6	1912.79	0.00	-1.61	71.0
1913.48	0.00	-0.94	71.9	1914.17	0.00	-0.27	72.9	1914.47	0.00	0.00	73.8
1914.49	0.00	0.00	74.8	1914.51	0.00	0.00	75.7	1914.54	0.00	0.00	76.7
1914.56	0.00	0.00	77.6	1914.58	0.00	0.00	78.6	1914.61	0.00	0.00	79.5
1914.63	0.00	0.00	80.5	1914.66	0.00	0.00	81.4	1914.68	0.00	0.00	82.4
1914.70	0.00	0.00	83.3	1914.73	0.00	0.00	84.3	1914.75	0.00	0.00	85.2
1914.77	0.00	0.00	86.2	1914.80	0.00	0.00	87.1	1914.82	0.00	0.00	88.1
1914.85	0.00	0.00	89.0	1914.87	0.00	0.00	90.0				

ID  
4 SECTION 158.00 TIME = 29.06 HRS WS =1910.45 WIDTH = 33.0

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1913.53	0.00	0.00	10.0	1913.51	0.00	0.00	10.9	1913.48	0.00	0.00	11.9
1913.45	0.00	0.00	12.8	1913.43	0.00	0.00	13.8	1913.40	0.00	0.00	14.7
1913.38	0.00	0.00	15.7	1913.35	0.00	0.00	16.6	1913.33	0.00	0.00	17.6
1913.30	0.00	0.00	18.6	1913.28	0.00	0.00	19.5	1913.25	0.00	0.00	20.5
1913.23	0.00	0.00	21.4	1913.20	0.00	0.00	22.4	1913.18	0.00	0.00	23.3
1913.15	0.00	0.00	24.3	1913.13	0.00	0.00	25.2	1913.10	0.00	0.00	26.2
1913.08	0.00	0.00	27.1	1912.59	0.00	-0.46	28.1	1911.90	0.00	-1.13	29.0
1911.66	0.00	-0.97	29.3	1911.44	0.00	-0.79	29.7	1911.09	0.00	-0.74	30.4
1910.80	0.00	-0.63	31.1	1910.22	0.00	-0.81	32.9	1910.17	0.00	-0.76	33.7
1910.16	0.00	-0.67	34.4	1910.16	0.00	-0.57	35.0	1910.16	0.00	-0.56	36.0
1910.18	0.00	-0.52	36.9	1910.14	0.00	-0.55	37.8	1909.82	0.00	-0.86	38.8
1909.68	0.00	-0.99	39.7	1909.67	0.00	-0.98	40.6	1909.67	0.00	-0.98	41.6
1909.66	0.00	-0.97	42.5	1909.65	0.00	-0.96	43.4	1909.65	0.00	-0.96	44.4
1909.64	0.00	-0.95	45.3	1909.64	0.00	-0.95	46.2	1909.63	0.00	-0.94	47.2
1909.62	0.00	-0.93	48.1	1909.62	0.00	-0.93	49.1	1909.61	0.00	-0.92	50.0
1909.62	0.00	-0.93	50.9	1909.62	0.00	-0.93	51.9	1909.63	0.00	-0.94	52.8
1909.63	0.00	-0.95	53.7	1909.64	0.00	-0.96	54.7	1909.65	0.00	-0.96	55.6
1909.65	0.00	-0.97	56.5	1909.66	0.00	-0.98	57.5	1909.67	0.00	-0.98	58.4
1909.67	0.00	-0.99	59.3	1909.68	0.00	-1.00	60.3	1909.81	0.00	-0.88	61.2
1910.13	0.00	-0.58	62.1	1910.30	0.00	-0.42	63.0	1910.30	0.00	-0.42	64.0
1910.38	0.00	-0.43	65.0	1910.62	0.00	-0.25	65.4	1910.81	0.00	-0.15	66.3
1910.90	0.00	-0.13	67.5	1911.20	0.00	-0.34	68.4	1911.46	0.00	-0.57	69.3
1911.54	0.00	-0.99	69.8	1911.64	0.00	-1.38	70.1	1912.28	0.00	-0.77	71.0
1912.97	0.00	-0.10	71.9	1913.10	0.00	0.00	72.9	1913.13	0.00	0.00	73.8
1913.15	0.00	0.00	74.8	1913.17	0.00	0.00	75.7	1913.20	0.00	0.00	76.7
1913.22	0.00	0.00	77.6	1913.24	0.00	0.00	78.6	1913.27	0.00	0.00	79.5
1913.29	0.00	0.00	80.5	1913.32	0.00	0.00	81.4	1913.34	0.00	0.00	82.4
1913.36	0.00	0.00	83.3	1913.39	0.00	0.00	84.3	1913.41	0.00	0.00	85.2
1913.43	0.00	0.00	86.2	1913.46	0.00	0.00	87.1	1913.48	0.00	0.00	88.1
1913.51	0.00	0.00	89.0	1913.53	0.00	0.00	90.0				

ID  
3 SECTION 157.00 TIME = 29.06 HRS WS =1909.31 WIDTH = 32.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1912.68	0.00	0.00	10.0	1912.63	0.00	0.00	10.9	1912.58	0.00	0.00	11.9
1912.53	0.00	0.00	12.8	1912.48	0.00	0.00	13.8	1912.43	0.00	0.00	14.7
1912.38	0.00	0.00	15.7	1912.33	0.00	0.00	16.6	1912.28	0.00	0.00	17.6
1912.23	0.00	0.00	18.6	1912.18	0.00	0.00	19.5	1912.13	0.00	0.00	20.5
1912.08	0.00	0.00	21.4	1912.03	0.00	0.00	22.4	1911.98	0.00	0.00	23.3
1911.93	0.00	0.00	24.3	1911.88	0.00	0.00	25.2	1911.83	0.00	0.00	26.2
1911.51	0.00	-0.27	27.1	1910.81	0.00	-0.91	28.1	1910.26	0.00	-1.42	28.8
1910.20	0.00	-0.98	29.1	1910.15	0.00	-0.53	29.5	1910.09	0.00	-0.09	30.6
1910.02	0.00	0.34	31.2	1909.75	0.00	0.57	33.1	1909.63	0.00	0.55	33.3
1909.59	0.00	0.61	34.1	1909.55	0.00	0.66	34.7	1909.22	-0.03	0.36	35.4
1909.00	0.01	0.15	35.9	1908.98	0.01	0.13	37.3	1908.96	0.01	0.13	38.5
1908.98	0.01	0.16	39.7	1908.98	0.01	0.17	40.6	1908.84	0.01	0.05	41.6
1908.69	0.01	-0.09	42.5	1908.57	0.02	-0.20	43.4	1908.46	0.02	-0.30	44.4
1908.44	0.02	-0.30	45.3	1908.42	0.02	-0.31	46.2	1908.41	0.02	-0.30	47.2
1908.41	0.02	-0.30	48.1	1908.40	0.02	-0.29	49.1	1908.40	0.02	-0.28	50.0
1908.40	0.02	-0.29	50.9	1908.41	0.02	-0.30	51.9	1908.41	0.02	-0.31	52.8
1908.42	0.02	-0.31	53.7	1908.44	0.02	-0.31	54.7	1908.46	0.02	-0.30	55.6
1908.56	0.02	-0.21	56.5	1908.68	0.01	-0.10	57.5	1908.76	-0.02	-0.04	58.4
1908.74	-0.02	-0.07	59.3	1908.75	-0.02	-0.08	60.3	1908.73	-0.02	-0.11	61.3
1908.73	-0.02	-0.12	62.4	1908.74	-0.02	-0.13	63.1	1908.75	-0.02	-0.13	63.9
1908.75	-0.02	-0.21	65.0	1908.73	-0.02	-0.30	65.8	1908.76	-0.02	-0.35	67.0
1909.54	0.00	0.36	68.3	1909.61	0.00	-0.20	69.1	1909.63	0.00	-0.80	69.7
1909.73	0.00	-1.33	69.9	1910.29	0.00	-1.39	70.7	1910.46	0.00	-1.24	71.0

1911.15	0.00	-0.58	71.9	1911.75	0.00	0.00	72.9	1911.78	0.00	0.00	73.8
1911.80	0.00	0.00	74.8	1911.82	0.00	0.00	75.7	1911.85	0.00	0.00	76.7
1911.87	0.00	0.00	77.6	1911.89	0.00	0.00	78.6	1911.92	0.00	0.00	79.5
1911.94	0.00	0.00	80.5	1911.97	0.00	0.00	81.4	1911.99	0.00	0.00	82.4
1912.01	0.00	0.00	83.3	1912.04	0.00	0.00	84.3	1912.06	0.00	0.00	85.2
1912.08	0.00	0.00	86.2	1912.11	0.00	0.00	87.1	1912.13	0.00	0.00	88.1
1912.16	0.00	0.00	89.0	1912.18	0.00	0.00	90.0				

ID  
2 SECTION 156.00 TIME = 29.06 HRS WS =1906.84 WIDTH = 14.1

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1910.84	0.00	0.00	10.0	1910.79	0.00	0.00	10.9	1910.74	0.00	0.00	11.9
1910.69	0.00	0.00	12.8	1910.64	0.00	0.00	13.8	1910.59	0.00	0.00	14.7
1910.54	0.00	0.00	15.7	1910.49	0.00	0.00	16.6	1910.44	0.00	0.00	17.6
1910.39	0.00	0.00	18.6	1910.34	0.00	0.00	19.5	1910.29	0.00	0.00	20.5
1910.24	0.00	0.00	21.4	1910.19	0.00	0.00	22.4	1910.14	0.00	0.00	23.3
1910.09	0.00	0.00	24.3	1910.04	0.00	0.00	25.2	1909.99	0.00	0.00	26.2
1909.94	0.00	0.00	27.1	1909.89	0.00	0.00	28.1	1909.84	0.00	0.00	29.0
1909.34	0.00	0.00	29.8	1908.84	0.00	0.00	30.6	1908.34	0.00	0.00	31.4
1908.04	0.00	0.20	32.4	1907.91	0.00	0.57	33.5	1907.78	0.00	0.54	34.0
1907.63	0.00	0.49	34.8	1907.51	0.00	0.47	35.3	1907.30	0.00	0.28	36.4
1907.29	0.00	0.27	37.6	1907.27	0.00	0.27	38.5	1907.24	0.00	0.25	39.5
1907.08	0.00	0.10	40.5	1906.95	0.00	-0.01	41.4	1906.92	0.00	-0.03	42.3
1906.74	0.01	-0.20	43.3	1906.57	0.01	-0.35	43.5	1905.90	0.01	-1.01	44.4
1905.35	-0.01	-1.56	45.3	1905.35	-0.01	-1.54	46.2	1905.35	-0.01	-1.53	47.2
1905.35	-0.01	-1.52	48.1	1905.35	-0.01	-1.51	49.1	1905.35	-0.01	-1.49	50.0
1905.35	-0.01	-1.51	50.9	1905.35	-0.01	-1.52	51.9	1905.35	-0.01	-1.53	52.8
1905.35	-0.01	-1.55	53.7	1905.36	0.00	-1.55	54.7	1906.05	0.00	-0.87	55.6
1906.67	0.00	-0.27	56.4	1906.81	0.00	-0.13	56.6	1906.92	0.00	-0.04	57.6
1907.05	0.00	0.08	58.6	1907.14	0.00	0.16	59.5	1907.24	0.00	0.24	60.4
1907.27	0.00	0.26	61.5	1907.29	0.00	0.27	62.3	1907.32	0.00	0.28	63.9
1907.51	0.00	0.40	64.3	1907.69	0.00	0.51	65.1	1907.81	0.00	0.54	66.0
1907.94	0.00	0.60	66.6	1908.04	0.00	0.08	67.6	1908.66	0.00	0.07	68.5
1909.20	0.00	-0.01	69.2	1909.75	0.00	-0.09	70.0	1909.89	0.00	0.00	71.0
1909.94	0.00	0.00	71.9	1909.98	0.00	0.00	72.9	1910.03	0.00	0.00	73.8
1910.08	0.00	0.00	74.8	1910.13	0.00	0.00	75.7	1910.17	0.00	0.00	76.7
1910.22	0.00	0.00	77.6	1910.27	0.00	0.00	78.6	1910.32	0.00	0.00	79.5
1910.36	0.00	0.00	80.5	1910.41	0.00	0.00	81.4	1910.46	0.00	0.00	82.4
1910.51	0.00	0.00	83.3	1910.55	0.00	0.00	84.3	1910.60	0.00	0.00	85.2
1910.65	0.00	0.00	86.2	1910.70	0.00	0.00	87.1	1910.74	0.00	0.00	88.1
1910.79	0.00	0.00	89.0	1910.84	0.00	0.00	90.0				

ID  
1 SECTION 155.00 TIME = 29.06 HRS WS =1906.74 WIDTH = 37.5

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1909.00	0.00	0.00	10.0	1908.95	0.00	0.00	10.9	1908.90	0.00	0.00	11.9
1908.85	0.00	0.00	12.8	1908.80	0.00	0.00	13.8	1908.75	0.00	0.00	14.7
1908.70	0.00	0.00	15.7	1908.65	0.00	0.00	16.6	1908.60	0.00	0.00	17.6
1908.55	0.00	0.00	18.6	1908.50	0.00	0.00	19.5	1908.45	0.00	0.00	20.5
1908.40	0.00	0.00	21.4	1908.35	0.00	0.00	22.4	1908.30	0.00	0.00	23.3
1908.25	0.00	0.00	24.3	1908.20	0.00	0.00	25.2	1908.15	0.00	0.00	26.2
1908.10	0.00	0.00	27.1	1908.05	0.00	0.00	28.1	1908.00	0.00	0.00	29.0
1907.50	0.00	0.00	29.8	1907.00	0.00	0.00	30.6	1906.50	0.00	0.00	31.4
1906.00	0.00	0.00	32.2	1905.50	0.00	0.00	33.0	1905.40	0.00	0.00	33.7
1905.30	0.00	0.00	34.3	1905.20	0.00	0.00	35.0	1905.19	0.00	0.00	35.9
1905.18	0.00	0.00	36.9	1905.16	0.00	0.00	37.8	1905.15	0.00	0.00	38.8
1905.14	0.00	0.00	39.7	1905.13	0.00	0.00	40.6	1905.11	0.00	0.00	41.6
1905.10	0.01	0.00	42.5	1905.09	0.01	0.00	43.4	1905.08	0.01	0.00	44.4

1905.06	-0.01	0.00	45.3	1905.05	-0.01	0.00	46.2	1905.04	-0.01	0.00	47.2
1905.03	-0.01	0.00	48.1	1905.01	-0.01	0.00	49.1	1905.00	-0.01	0.00	50.0
1905.01	-0.01	0.00	50.9	1905.02	-0.01	0.00	51.9	1905.04	-0.01	0.00	52.8
1905.05	-0.01	0.00	53.8	1905.06	0.00	0.00	54.7	1905.07	0.00	0.00	55.6
1905.09	0.00	0.00	56.6	1905.10	0.00	0.00	57.5	1905.11	0.00	0.00	58.4
1905.12	0.00	0.00	59.4	1905.14	0.00	0.00	60.3	1905.15	0.00	0.00	61.2
1905.16	0.00	0.00	62.2	1905.17	0.00	0.00	63.1	1905.19	0.00	0.00	64.1
1905.20	0.00	0.00	65.0	1905.30	0.00	0.00	65.7	1905.40	0.00	0.00	66.3
1905.50	0.00	0.00	67.0	1906.12	0.00	0.00	67.8	1906.75	0.00	0.00	68.5
1907.38	0.00	0.00	69.2	1908.00	0.00	0.00	70.0	1908.05	0.00	0.00	71.0
1908.10	0.00	0.00	71.9	1908.14	0.00	0.00	72.9	1908.19	0.00	0.00	73.8
1908.24	0.00	0.00	74.8	1908.29	0.00	0.00	75.7	1908.33	0.00	0.00	76.7
1908.38	0.00	0.00	77.6	1908.43	0.00	0.00	78.6	1908.48	0.00	0.00	79.5
1908.52	0.00	0.00	80.5	1908.57	0.00	0.00	81.4	1908.62	0.00	0.00	82.4
1908.67	0.00	0.00	83.3	1908.71	0.00	0.00	84.3	1908.76	0.00	0.00	85.2
1908.81	0.00	0.00	86.2	1908.86	0.00	0.00	87.1	1908.90	0.00	0.00	88.1
1908.95	0.00	0.00	89.0	1909.00	0.00	0.00	90.0				

1

TIME = 30.03 HRS DT = 120 SECS TIME STEP = 933

SECTION	W.S.ELEV.	WIDTH	DEPTH	Q	V	SLOPE	D50	QS/Q	FR	SED.	YIELD
	FT	FT	FT	CFS	FPS	MM	1000	PPM		TONS	

155.000	1906.72	37.4	1.72	79	1.41	0.000486	0.46	0.36	0.20	0.488E+03
156.000	1906.72	13.1	1.34	79	5.23	0.009992	0.61	16.89	0.86	0.616E+04
157.000	1909.20	32.5	1.02	79	3.89	0.011660	0.51	7.27	0.87	0.619E+04
158.000	1910.39	32.9	0.75	79	4.18	0.014990	0.68	15.94	0.97	0.613E+04
159.000	1912.19	37.4	0.73	79	3.93	0.014424	0.56	9.12	0.94	0.598E+04
160.000	1915.39	34.9	0.73	79	4.12	0.015474	0.56	17.22	0.98	0.578E+04
161.000	1917.39	45.4	0.91	79	3.68	0.015034	0.61	12.59	0.94	0.590E+04
162.000	1918.69	43.6	0.81	79	3.37	0.010661	0.53	8.20	0.81	0.596E+04
163.000	1920.69	46.7	0.86	79	3.35	0.011452	0.45	5.86	0.83	0.592E+04
164.000	1921.79	43.6	0.81	79	3.55	0.012673	0.58	13.71	0.88	0.591E+04
165.000	1922.99	43.9	0.86	79	3.41	0.011121	0.60	2.55	0.83	0.574E+04
166.000	1924.79	41.3	0.70	79	3.88	0.015745	0.52	14.17	0.97	0.545E+04
167.000	1927.31	19.8	0.92	79	4.75	0.011909	0.55	14.47	0.91	0.528E+04
168.000	1930.87	60.9	0.97	79	3.26	0.014837	0.57	13.59	0.91	0.551E+04
169.000	1932.40	47.6	0.81	79	3.17	0.009685	0.46	3.40	0.77	0.585E+04
170.000	1934.30	62.4	0.64	79	2.80	0.009198	0.66	10.75	0.73	0.611E+04
171.000	1935.20	23.3	0.87	79	4.30	0.010522	0.71	11.91	0.85	0.636E+04
172.000	1939.10	62.3	0.89	79	2.90	0.010341	0.44	4.45	0.77	0.653E+04
173.000	1940.13	40.1	0.83	79	3.51	0.010980	0.50	9.30	0.83	0.717E+04
174.000	1941.08	63.3	1.08	79	2.52	0.006615	0.52	6.67	0.63	0.756E+04

ID

19 SECTION 173.00 TIME = 30.03 HRS WS = 1940.13 WIDTH = 40.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1940.66	0.00	0.00	10.0	1940.41	0.00	0.96	10.9	1940.41	0.00	0.97	11.9
1940.41	0.00	0.98	12.8	1940.40	0.00	0.98	13.8	1940.40	0.00	0.99	14.7
1940.40	0.00	1.00	15.7	1940.39	0.00	1.00	16.6	1940.39	0.00	1.01	17.6
1940.38	0.00	1.01	18.6	1940.37	0.00	1.01	19.5	1940.36	0.00	1.01	20.5
1940.36	0.00	1.02	21.4	1940.35	0.00	1.03	22.4	1940.35	0.00	1.03	23.3
1940.34	0.00	1.03	24.3	1940.33	0.00	1.03	25.2	1940.32	0.00	1.03	26.2
1940.30	0.00	1.02	27.1	1940.27	0.00	1.00	28.1	1940.25	0.00	0.99	29.0
1940.11	0.00	0.97	29.8	1940.10	0.00	1.08	30.6	1940.09	0.00	1.19	31.4
1940.09	0.00	1.31	32.2	1940.08	0.00	1.42	33.0	1940.07	0.00	1.44	33.9
1940.07	0.00	1.46	34.8	1940.01	0.00	1.43	35.8	1939.37	0.00	0.81	36.7
1939.36	0.00	0.82	37.6	1939.35	0.00	0.84	38.5	1939.35	0.00	0.86	39.4
1939.34	0.00	0.88	40.3	1939.34	0.00	0.90	41.3	1939.33	-0.01	0.92	42.2
1939.33	-0.01	0.95	43.1	1939.32	-0.01	0.97	44.0	1939.32	-0.01	0.99	44.9

1939.32	-0.01	1.01	45.7	1939.31	-0.01	1.04	46.6	1939.31	-0.01	1.06	47.4	
1939.30	-0.01	1.09	48.3	1939.30	-0.01	1.11	49.1	1939.30	-0.01	1.13	50.0	
1939.30	-0.01	1.11	50.8	1939.30	-0.01	1.08	51.7	1939.31	-0.01	1.05	52.5	
1939.31	-0.01	1.02	53.3	1939.32	-0.01	0.99	54.2	1939.32	-0.01	0.96	55.0	
1939.32	-0.01	0.94	55.9	1939.33	-0.01	0.92	56.8	1939.33	-0.01	0.90	57.8	
1939.34	0.00	0.89	58.7	1939.34	0.00	0.87	59.6	1939.35	0.00	0.85	60.5	
1939.35	0.00	0.83	61.5	1939.36	0.00	0.81	62.4	1939.37	0.00	0.80	63.3	
1940.03	0.00	1.44	64.2	1940.07	0.00	1.46	65.2	1940.07	0.00	1.44	66.1	
1940.08	0.00	1.42	67.0	1940.09	0.00	1.27	67.8	1940.09	0.00	1.13	68.5	
1940.10	0.00	0.99	69.2	1940.14	0.00	0.89	70.0	1940.24	0.00	0.97	70.9	
1940.27	0.00	0.99	71.8	1940.30	0.00	1.02	72.7	1940.32	0.00	1.02	73.6	
1940.33	0.00	1.02	74.5	1940.34	0.00	1.03	75.5	1940.35	0.00	1.02	76.4	
1940.35	0.00	1.02	77.3	1940.36	0.00	1.02	78.2	1940.42	0.00	1.07	79.1	
1940.66	0.00	0.00	80.0									

ID  
18 SECTION 172.00 TIME = 30.03 HRS WS = 1939.10 WIDTH = 62.3

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1939.61	0.00	0.00	10.0	1939.33	0.00	1.82	10.9	1939.32	0.00	1.82	12.3	
1939.31	0.00	1.83	13.0	1939.22	0.00	1.74	13.8	1939.17	0.00	1.70	14.6	
1938.84	0.00	1.38	15.5	1938.82	0.00	1.37	16.7	1938.83	0.00	1.39	17.6	
1938.83	0.00	1.40	18.5	1938.83	0.00	1.41	19.3	1938.83	0.00	1.42	20.5	
1938.82	0.00	1.42	21.7	1938.83	0.00	1.43	22.4	1938.82	0.00	1.44	23.3	
1938.83	0.00	1.46	24.3	1938.82	0.00	1.46	25.2	1938.83	0.00	1.48	26.2	
1938.83	0.00	1.49	27.1	1938.82	0.00	1.49	27.8	1938.82	0.00	1.50	28.9	
1938.82	0.00	1.60	29.8	1938.82	0.00	1.69	30.5	1938.82	0.00	1.80	31.2	
1938.82	0.00	1.90	32.0	1938.83	0.00	2.01	32.7	1938.82	0.00	2.03	33.6	
1938.82	0.00	2.06	34.4	1938.82	0.00	2.08	35.2	1938.81	0.00	2.10	36.2	
1938.82	0.00	2.14	37.2	1938.64	0.00	1.99	38.5	1938.59	0.01	1.96	39.4	
1938.54	0.01	1.94	40.3	1938.49	0.01	1.92	41.2	1938.47	0.01	1.92	42.1	
1938.44	0.01	1.92	43.0	1938.42	0.01	1.92	43.9	1938.39	0.01	1.92	44.8	
1938.37	0.01	1.92	45.6	1938.34	0.01	1.92	46.5	1938.31	0.01	1.91	47.4	
1938.28	0.01	1.91	48.2	1938.25	0.01	1.91	49.1	1938.22	0.01	1.90	50.0	
1938.25	0.01	1.90	50.8	1938.28	0.01	1.89	51.7	1938.30	0.01	1.89	52.5	
1938.33	0.01	1.88	53.3	1938.36	0.01	1.87	54.2	1938.38	0.01	1.87	55.0	
1938.41	0.01	1.87	55.9	1938.44	0.01	1.87	56.8	1938.47	0.01	1.88	57.8	
1938.49	0.01	1.88	58.7	1938.53	0.01	1.90	59.6	1938.59	0.01	1.93	60.5	
1938.65	0.00	1.97	61.7	1938.83	0.00	2.13	62.7	1938.84	0.00	2.11	63.7	
1938.84	0.00	2.09	64.7	1938.83	0.00	2.05	65.5	1938.82	0.00	2.03	66.4	
1938.84	0.00	2.02	67.2	1938.84	0.00	1.89	67.8	1938.82	0.00	1.75	68.5	
1938.82	0.00	1.63	69.4	1938.84	0.00	1.52	70.1	1938.82	0.00	1.48	70.9	
1938.83	0.00	1.47	71.8	1938.82	0.00	1.45	72.7	1938.82	0.00	1.43	73.7	
1938.84	0.00	1.43	74.5	1938.82	0.00	1.39	75.3	1938.86	0.00	1.41	76.7	
1939.11	0.00	1.65	77.1	1939.32	0.00	1.84	77.8	1939.33	0.00	1.82	79.0	
1939.61	0.00	0.00	80.0									

ID  
17 SECTION 171.00 TIME = 30.03 HRS WS = 1935.20 WIDTH = 23.3

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1936.58	0.00	0.00	10.0	1936.20	0.00	0.44	10.9	1936.20	0.00	0.46	12.1	
1936.19	0.00	0.47	13.0	1936.19	0.00	0.48	13.9	1936.19	0.00	0.49	14.8	
1936.20	0.00	0.52	15.7	1936.19	0.00	0.53	16.7	1936.20	0.00	0.55	17.6	
1936.19	0.00	0.56	18.6	1936.19	0.00	0.57	19.5	1936.19	0.00	0.59	20.5	
1936.19	0.00	0.60	21.3	1936.19	0.00	0.62	22.1	1936.19	0.00	0.63	22.8	
1936.20	0.00	0.65	23.7	1936.19	0.00	0.66	24.6	1936.19	0.00	0.67	25.5	
1936.19	0.00	0.69	26.3	1936.19	0.00	0.71	27.4	1936.19	0.00	0.72	28.4	
1936.18	0.00	0.81	29.2	1936.18	0.00	0.91	29.8	1936.17	0.00	1.00	31.4	
1936.15	0.00	1.09	32.2	1936.16	0.00	1.19	33.0	1936.14	0.00	1.20	33.9	

1935.88	0.00	0.97	34.7	1935.74	0.00	0.86	35.7	1935.68	0.00	0.83	36.6
1935.64	0.00	0.82	37.5	1935.17	-0.01	0.37	38.3	1934.82	-0.01	0.06	39.3
1934.37	-0.02	-0.36	40.2	1934.32	-0.02	-0.38	41.1	1934.32	-0.02	-0.36	42.0
1934.32	-0.02	-0.33	42.9	1934.32	-0.02	-0.31	43.8	1934.32	-0.02	-0.29	44.7
1934.32	-0.02	-0.27	45.6	1934.32	-0.02	-0.24	46.4	1934.32	-0.02	-0.22	47.3
1934.32	-0.02	-0.20	48.2	1934.32	-0.02	-0.18	49.1	1934.31	-0.02	-0.16	50.0
1934.32	-0.02	-0.19	50.8	1934.32	-0.02	-0.22	51.7	1934.32	-0.02	-0.25	52.5
1934.32	-0.02	-0.29	53.3	1934.32	-0.02	-0.32	54.2	1934.32	-0.02	-0.35	55.0
1934.32	-0.02	-0.38	55.9	1934.32	-0.02	-0.40	56.8	1934.32	-0.02	-0.42	57.8
1934.32	-0.02	-0.45	58.7	1934.32	-0.02	-0.47	59.6	1934.75	-0.01	-0.06	60.5
1935.17	-0.01	0.33	61.5	1935.49	0.00	0.63	62.4	1935.63	0.00	0.75	63.3
1935.68	0.00	0.78	64.2	1935.84	0.00	0.91	65.2	1936.13	0.00	1.18	66.1
1936.14	0.00	1.17	67.0	1936.13	0.00	1.03	67.8	1936.12	0.00	0.90	69.3
1936.13	0.00	0.79	69.8	1936.14	0.00	0.67	70.7	1936.14	0.00	0.65	71.7
1936.14	0.00	0.62	72.6	1936.14	0.00	0.60	73.6	1936.16	0.00	0.59	74.3
1936.22	0.00	0.63	75.2	1936.24	0.00	0.62	75.9	1936.24	0.00	0.60	76.6
1936.24	0.00	0.57	77.5	1936.24	0.00	0.55	78.4	1936.24	0.00	0.52	79.3
1936.25	0.00	0.50	80.3	1936.25	0.00	0.48	81.2	1936.30	0.00	0.50	82.1
1936.30	0.00	0.48	83.0	1936.31	0.00	0.46	83.9	1936.58	0.00	0.00	85.0

ID  
16 SECTION 170.00 TIME = 30.03 HRS WS =1934.30 WIDTH = 62.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1934.70	0.00	0.00	10.0	1934.37	0.00	0.36	10.8	1934.32	0.00	0.32	12.0
1934.17	-0.03	0.20	12.8	1934.15	-0.03	0.20	13.8	1934.15	-0.03	0.21	14.6
1934.17	0.00	0.26	15.7	1934.15	-0.03	0.26	16.6	1934.16	0.00	0.29	17.6
1934.17	0.00	0.32	18.6	1934.17	0.00	0.34	19.4	1934.16	0.00	0.35	20.2
1934.14	-0.03	0.35	20.9	1934.16	0.00	0.39	21.7	1934.16	0.00	0.41	22.8
1933.87	0.00	0.14	23.6	1933.82	0.00	0.11	24.6	1933.81	0.00	0.12	25.6
1933.81	0.00	0.14	26.6	1933.81	0.00	0.16	27.4	1933.78	0.00	0.15	28.4
1933.78	0.00	0.25	29.2	1933.80	0.00	0.37	30.6	1933.80	0.00	0.47	31.0
1933.77	0.00	0.54	32.3	1933.77	0.00	0.64	33.0	1933.77	0.00	0.68	33.7
1933.77	0.00	0.71	34.8	1933.80	0.00	0.77	35.7	1933.77	0.00	0.78	36.6
1933.77	0.00	0.80	37.4	1933.80	0.00	0.87	38.3	1933.80	0.00	0.90	39.2
1933.75	0.00	0.89	40.1	1933.79	0.00	0.96	41.0	1933.77	0.00	0.96	41.9
1933.74	0.00	0.95	42.8	1933.73	0.00	0.96	43.7	1933.72	0.00	0.97	44.6
1933.71	0.00	0.98	45.5	1933.70	0.00	0.99	46.4	1933.69	0.00	1.00	47.3
1933.69	0.00	1.01	48.2	1933.68	0.00	1.03	49.1	1933.67	0.00	1.04	50.0
1933.68	0.00	1.02	50.9	1933.68	0.00	1.00	51.7	1933.69	0.00	0.98	52.6
1933.70	0.00	0.96	53.4	1933.71	0.00	0.94	54.3	1933.72	0.00	0.92	55.1
1933.72	0.00	0.89	56.0	1933.74	0.00	0.88	56.9	1933.76	0.00	0.88	57.8
1933.79	0.00	0.88	58.8	1933.81	0.00	0.88	59.7	1933.83	0.00	0.88	60.6
1933.85	0.00	0.87	61.5	1933.81	0.00	0.81	62.4	1933.83	0.00	0.80	63.3
1933.83	0.00	0.77	64.3	1933.85	0.00	0.77	65.2	1933.83	0.00	0.72	66.1
1933.85	0.00	0.72	67.6	1933.86	0.00	0.52	68.3	1933.86	0.00	0.33	69.2
1933.85	0.00	0.12	70.1	1933.83	0.00	-0.10	70.9	1933.86	0.00	-0.07	72.0
1933.86	0.00	-0.06	72.7	1933.89	0.00	-0.03	73.4	1934.22	-0.03	0.31	74.1
1934.34	0.00	0.43	74.8	1934.34	0.00	0.44	75.7	1934.34	0.00	0.45	76.7
1934.34	0.00	0.45	77.6	1934.34	0.00	0.46	78.6	1934.34	0.00	0.46	79.5
1934.35	0.00	0.47	80.5	1934.36	0.00	0.49	81.5	1934.36	0.00	0.50	82.4
1934.36	0.00	0.50	83.3	1934.36	0.00	0.51	84.3	1934.37	0.00	0.52	85.2
1934.39	0.00	0.54	86.1	1934.40	0.00	0.56	87.0	1934.42	0.00	0.58	88.0
1934.42	0.00	0.59	88.9	1934.70	0.00	0.00	90.0				

ID  
15 SECTION 169.00 TIME = 30.03 HRS WS =1932.40 WIDTH = 47.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1932.89	0.00	0.00	10.0	1932.65	0.00	0.39	11.0	1932.65	0.00	0.41	11.6
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1932.64	0.00	0.43	13.0	1932.64	0.00	0.45	13.9	1932.61	0.00	0.44	14.9
1932.57	0.00	0.43	15.7	1932.57	0.00	0.45	16.5	1932.57	0.00	0.47	17.3
1932.56	0.00	0.50	18.6	1932.56	0.00	0.52	19.3	1932.56	0.00	0.54	20.1
1932.55	0.00	0.56	21.3	1932.55	0.00	0.58	22.4	1932.55	0.00	0.61	23.1
1932.54	0.00	0.63	23.9	1932.54	0.00	0.65	24.9	1932.19	-0.01	0.32	26.0
1932.11	0.01	0.27	26.7	1932.11	0.01	0.29	28.0	1932.09	0.01	0.30	29.0
1932.10	0.01	0.41	29.8	1932.09	0.01	0.50	30.4	1932.09	0.01	0.60	31.3
1932.09	0.01	0.70	32.1	1932.09	0.01	0.80	32.7	1932.09	0.01	0.83	33.9
1932.07	0.01	0.85	34.8	1932.08	0.01	0.89	35.7	1932.07	0.01	0.91	36.6
1932.04	0.01	0.92	37.4	1931.79	0.01	0.70	38.3	1931.78	0.01	0.72	39.2
1931.76	0.01	0.74	40.1	1931.75	0.01	0.76	41.0	1931.73	0.01	0.76	41.9
1931.72	0.01	0.77	42.8	1931.70	0.01	0.78	43.7	1931.69	0.01	0.78	44.6
1931.68	0.01	0.79	45.5	1931.66	0.01	0.79	46.4	1931.65	0.01	0.80	47.3
1931.63	0.01	0.80	48.2	1931.62	0.01	0.81	49.1	1931.60	0.01	0.81	50.0
1931.62	0.01	0.80	50.9	1931.63	0.01	0.79	51.7	1931.65	0.01	0.77	52.6
1931.66	0.01	0.75	53.4	1931.67	0.01	0.74	54.3	1931.69	0.01	0.73	55.1
1931.70	0.01	0.71	56.0	1931.72	0.01	0.70	56.9	1931.73	0.01	0.69	57.8
1931.74	0.01	0.68	58.8	1931.76	0.01	0.67	59.7	1931.77	0.01	0.66	60.6
1931.79	0.01	0.64	61.5	1932.00	0.01	0.83	62.4	1932.03	0.01	0.84	63.3
1932.04	0.01	0.83	64.3	1932.04	0.01	0.80	65.2	1932.05	0.01	0.79	66.3
1932.05	0.01	0.77	67.0	1932.06	0.01	0.57	67.8	1932.06	0.01	0.37	68.7
1932.06	0.01	0.17	69.5	1932.06	0.01	-0.03	70.4	1932.06	0.01	-0.04	71.6
1932.07	-0.01	-0.04	72.1	1932.56	0.00	0.44	73.3	1932.59	0.00	0.46	74.3
1932.59	0.00	0.46	74.8	1932.60	0.00	0.45	75.7	1932.60	0.00	0.44	76.7
1932.60	0.00	0.43	77.6	1932.60	0.00	0.43	78.6	1932.60	0.00	0.41	79.5
1932.60	0.00	0.41	80.5	1932.60	0.00	0.40	81.5	1932.62	0.00	0.40	82.4
1932.64	0.00	0.42	83.3	1932.64	0.00	0.41	84.2	1932.64	0.00	0.40	85.2
1932.64	0.00	0.39	86.1	1932.65	0.00	0.39	87.1	1932.65	0.00	0.38	88.0
1932.65	0.00	0.37	88.9	1932.89	0.00	0.00	90.0				

ID  
14 SECTION 168.00 TIME = 30.03 HRS WS =1930.87 WIDTH = 60.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1931.23	0.00	0.00	10.0	1930.91	0.00	0.48	10.8	1930.89	0.00	0.49	12.0
1930.89	0.00	0.51	12.8	1930.88	0.00	0.53	13.8	1930.80	0.00	0.48	14.7
1930.76	0.00	0.46	15.7	1930.76	0.00	0.49	16.6	1930.75	0.00	0.50	17.3
1930.75	0.00	0.52	18.2	1930.75	0.00	0.55	19.1	1930.75	0.00	0.57	20.4
1930.75	0.00	0.60	21.4	1930.74	0.00	0.62	22.4	1930.74	0.00	0.64	23.3
1930.74	0.00	0.66	24.2	1930.69	0.00	0.64	24.9	1930.65	0.00	0.63	25.7
1930.66	0.00	0.66	26.7	1930.65	0.00	0.67	27.6	1930.64	0.00	0.69	28.6
1930.64	0.00	0.79	29.3	1930.62	0.00	0.87	30.2	1930.62	0.00	0.96	31.0
1930.62	0.00	1.07	31.9	1930.60	-0.01	1.15	32.7	1930.60	-0.01	1.19	33.9
1930.59	-0.01	1.22	34.8	1930.58	-0.01	1.24	35.6	1930.48	-0.01	1.18	36.5
1930.45	-0.01	1.19	37.4	1930.42	-0.01	1.19	38.2	1930.39	-0.01	1.20	39.1
1930.35	-0.01	1.20	40.0	1930.32	-0.01	1.19	40.9	1930.28	-0.01	1.16	41.8
1930.24	-0.02	1.14	42.7	1930.19	-0.02	1.12	43.6	1930.15	-0.02	1.09	44.5
1930.10	-0.02	1.06	45.5	1930.05	-0.02	1.03	46.4	1930.01	-0.02	1.01	47.3
1929.97	-0.03	0.98	48.2	1929.92	-0.03	0.95	49.1	1929.87	-0.03	0.92	50.0
1929.92	-0.03	0.94	50.9	1929.96	-0.03	0.95	51.7	1930.00	-0.02	0.97	52.6
1930.04	-0.02	0.98	53.4	1930.09	-0.02	1.00	54.3	1930.13	-0.02	1.01	55.1
1930.18	-0.02	1.03	56.0	1930.22	-0.02	1.05	56.9	1930.26	-0.02	1.06	57.8
1930.30	-0.01	1.08	58.8	1930.34	-0.01	1.09	59.7	1930.37	-0.01	1.10	60.6
1930.41	-0.01	1.11	61.5	1930.44	-0.01	1.12	62.4	1930.47	-0.01	1.12	63.3
1930.59	-0.01	1.21	64.3	1930.62	-0.01	1.22	65.2	1930.64	0.00	1.21	66.1
1930.64	0.00	1.19	67.3	1930.64	0.00	0.99	68.1	1930.65	0.00	0.80	69.0
1930.66	0.00	0.61	70.0	1930.66	0.00	0.42	70.9	1930.67	0.00	0.41	71.7
1930.67	0.00	0.40	72.5	1930.67	0.00	0.39	73.4	1930.79	0.00	0.50	74.1
1930.88	0.00	0.58	74.8	1930.88	0.00	0.58	75.8	1930.88	0.00	0.56	76.7
1930.88	0.00	0.56	77.6	1930.89	0.00	0.55	78.6	1930.88	0.00	0.54	79.5
1930.88	0.00	0.52	80.5	1930.88	0.00	0.52	81.4	1930.89	0.00	0.52	82.4

1930.88	0.00	0.50	83.3	1930.89	0.00	0.50	84.3	1930.91	0.00	0.50	85.2
1930.94	0.00	0.53	86.1	1930.97	0.00	0.54	87.0	1930.98	0.00	0.55	88.0
1930.99	0.00	0.55	88.8	1931.23	0.00	0.00	90.0				

ID  
13 SECTION 167.00 TIME = 30.03 HRS WS =1927.31 WIDTH = 19.8

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1929.57	0.00	0.00	10.0	1929.32	0.00	0.74	10.8	1929.31	0.00	0.75	12.0
1929.30	0.00	0.77	12.6	1929.29	0.00	0.78	13.6	1929.27	0.00	0.78	14.9
1929.20	0.00	0.74	15.8	1929.11	0.00	0.68	16.7	1929.12	0.00	0.71	17.6
1929.09	0.00	0.71	18.5	1929.09	0.00	0.73	19.4	1929.11	0.00	0.78	20.3
1929.11	0.00	0.80	21.4	1929.11	0.00	0.83	22.4	1929.08	0.00	0.82	23.3
1929.10	0.00	0.87	24.3	1929.10	0.00	0.89	25.2	1929.10	0.00	0.92	26.2
1929.08	0.00	0.93	27.1	1929.07	0.00	0.93	28.1	1929.10	0.00	0.99	29.0
1929.09	0.00	1.08	29.8	1929.07	0.00	1.16	30.6	1929.04	0.00	1.23	31.4
1929.03	0.00	1.32	32.2	1929.03	0.00	1.42	33.0	1929.00	0.00	1.43	33.9
1928.97	0.00	1.45	34.7	1929.00	0.00	1.52	35.6	1928.92	0.00	1.49	36.4
1928.92	0.00	1.53	37.3	1928.44	0.00	1.08	38.2	1928.12	0.00	0.81	38.6
1927.57	-0.03	0.28	39.9	1927.13	-0.01	-0.14	40.5	1926.40	0.00	-0.86	41.8
1926.40	0.00	-0.84	42.7	1926.40	0.00	-0.83	43.6	1926.40	0.00	-0.81	44.5
1926.40	0.00	-0.79	45.4	1926.40	0.00	-0.78	46.3	1926.40	0.00	-0.76	47.3
1926.40	0.00	-0.74	48.2	1926.40	0.00	-0.73	49.1	1926.40	0.00	-0.71	50.0
1926.40	0.00	-0.73	50.9	1926.40	0.00	-0.75	51.8	1926.40	0.00	-0.78	52.7
1926.40	0.00	-0.80	53.6	1926.40	0.00	-0.82	54.4	1926.40	0.00	-0.84	55.3
1926.40	0.00	-0.87	56.2	1926.40	0.00	-0.89	57.1	1926.40	0.00	-0.91	58.0
1926.68	0.00	-0.66	59.0	1927.21	-0.03	-0.16	60.0	1928.00	-0.01	0.60	61.1
1928.33	0.00	0.90	61.6	1928.97	0.00	1.51	62.5	1929.08	0.00	1.59	63.4
1929.19	0.00	1.67	64.3	1929.21	0.00	1.66	65.2	1929.20	0.00	1.62	66.1
1929.22	0.00	1.61	67.0	1929.27	0.00	1.46	67.8	1929.25	0.00	1.24	68.5
1929.26	0.00	1.05	69.4	1929.26	0.00	0.85	70.0	1929.26	0.00	0.84	70.9
1929.27	0.00	0.84	71.9	1929.28	0.00	0.84	72.8	1929.28	0.00	0.83	73.8
1929.28	0.00	0.82	74.8	1929.29	0.00	0.82	75.7	1929.30	0.00	0.82	76.6
1929.30	0.00	0.81	77.6	1929.30	0.00	0.81	78.5	1929.30	0.00	0.80	79.9
1929.31	0.00	0.79	80.5	1929.31	0.00	0.78	81.4	1929.31	0.00	0.78	82.3
1929.31	0.00	0.77	83.2	1929.32	0.00	0.77	84.7	1929.32	0.00	0.76	85.2
1929.33	0.00	0.76	86.2	1929.33	0.00	0.75	87.0	1929.34	0.00	0.75	88.0
1929.34	0.00	0.74	88.8	1929.57	0.00	0.00	90.0				

ID  
12 SECTION 166.00 TIME = 30.03 HRS WS =1924.79 WIDTH = 41.3

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1927.53	0.00	0.00	10.0	1927.22	0.00	0.01	10.9	1927.20	0.00	0.04	11.9
1927.15	0.00	0.04	12.9	1927.12	0.00	0.06	13.8	1927.11	0.00	0.10	14.7
1927.12	0.00	0.16	15.7	1927.13	0.00	0.22	16.7	1927.11	0.00	0.25	17.6
1927.09	0.00	0.28	18.6	1927.08	0.00	0.32	19.5	1927.07	0.00	0.36	20.5
1927.04	0.00	0.38	21.3	1927.04	0.00	0.43	22.3	1927.04	0.00	0.48	23.3
1927.04	0.00	0.53	24.3	1927.04	0.00	0.58	25.2	1926.86	0.00	0.45	26.2
1926.16	0.00	-0.20	27.1	1925.47	0.00	-0.84	28.1	1924.82	0.00	-1.44	28.9
1924.67	0.02	-1.50	29.3	1924.59	0.00	-1.47	30.1	1924.59	0.00	-1.38	30.3
1924.54	0.00	-1.32	30.5	1924.51	0.00	-1.24	33.0	1924.50	0.00	-1.21	33.9
1924.48	0.00	-1.19	34.7	1924.47	0.00	-1.16	35.6	1924.44	0.00	-1.14	36.4
1924.42	0.00	-1.13	37.3	1924.39	0.00	-1.11	38.1	1924.36	0.00	-1.10	39.0
1924.31	0.00	-1.13	39.9	1924.26	0.00	-1.17	40.8	1924.21	0.00	-1.20	41.8
1924.15	0.00	-1.24	42.7	1924.14	0.00	-1.24	43.6	1924.13	0.00	-1.23	44.5
1924.12	0.00	-1.22	45.4	1924.12	0.00	-1.21	46.3	1924.11	0.00	-1.20	47.3
1924.10	0.00	-1.19	48.2	1924.09	0.00	-1.19	49.1	1924.08	0.00	-1.18	50.0
1924.09	0.00	-1.19	50.9	1924.10	0.00	-1.20	51.8	1924.11	0.00	-1.21	52.7
1924.12	0.00	-1.23	53.6	1924.12	0.00	-1.24	54.5	1924.13	0.00	-1.25	55.4

1924.14	0.00	-1.26	56.3	1924.15	0.00	-1.28	57.2	1924.15	0.00	-1.29	58.1
1924.18	0.00	-1.28	59.0	1924.23	0.00	-1.27	59.9	1924.27	0.00	-1.26	60.8
1924.31	0.00	-1.25	61.7	1924.34	0.00	-1.25	62.6	1924.32	0.00	-1.31	63.4
1924.35	0.00	-1.31	64.3	1924.38	0.00	-1.31	65.2	1924.41	0.00	-1.32	66.1
1924.48	0.00	-1.28	67.9	1924.44	0.00	-1.45	68.8	1924.47	0.00	-1.54	69.0
1924.60	0.00	-1.53	69.7	1924.72	0.02	-1.54	70.2	1925.27	0.00	-1.01	71.0
1925.96	0.00	-0.35	71.9	1926.65	0.00	0.32	72.9	1926.99	0.00	0.63	73.8
1927.00	0.00	0.62	74.8	1927.02	0.00	0.62	75.7	1927.03	0.00	0.61	76.7
1927.05	0.00	0.60	77.6	1927.03	0.00	0.56	78.6	1927.05	0.00	0.55	79.5
1927.04	0.00	0.52	80.5	1927.05	0.00	0.50	81.4	1927.08	0.00	0.51	82.4
1927.08	0.00	0.49	83.3	1927.10	0.00	0.49	84.3	1927.11	0.00	0.47	85.3
1927.14	0.00	0.47	86.2	1927.15	0.00	0.46	87.1	1927.17	0.00	0.46	88.0
1927.26	0.00	0.52	88.9	1927.53	0.00	0.00	90.0				

## ID

11 SECTION 165.00 TIME = 30.03 HRS WS =1922.99 WIDTH = 43.9

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1925.42	0.00	0.00	10.0	1925.40	0.00	0.00	10.9	1925.37	0.00	0.00	11.9
1925.34	0.00	0.00	12.8	1925.32	0.00	0.00	13.8	1925.29	0.00	0.00	14.7
1925.27	0.00	0.00	15.7	1925.24	0.00	0.00	16.6	1925.22	0.00	0.00	17.6
1925.19	0.00	0.00	18.6	1925.17	0.00	0.00	19.5	1925.14	0.00	0.00	20.5
1925.12	0.00	0.00	21.4	1925.09	0.00	0.00	22.4	1925.07	0.00	0.00	23.3
1925.04	0.00	0.00	24.3	1925.02	0.00	0.00	25.2	1924.65	0.00	-0.35	26.2
1923.96	0.00	-1.01	27.1	1923.36	0.00	-1.58	27.9	1923.19	0.00	-1.73	28.1
1923.05	0.00	-1.67	28.3	1922.85	-0.01	-1.67	28.6	1922.85	-0.01	-1.47	30.5
1922.83	0.01	-1.29	31.8	1922.79	0.01	-1.13	33.0	1922.76	0.01	-1.11	33.8
1922.72	0.01	-1.10	34.7	1922.68	0.01	-1.09	35.5	1922.64	0.01	-1.08	36.3
1922.59	0.02	-1.08	37.2	1922.53	0.02	-1.09	38.0	1922.47	0.02	-1.14	38.9
1922.39	0.02	-1.20	39.8	1922.32	0.02	-1.25	40.8	1922.25	0.02	-1.31	41.7
1922.19	0.02	-1.36	42.6	1922.18	0.02	-1.35	43.5	1922.18	0.02	-1.34	44.5
1922.17	0.02	-1.32	45.4	1922.17	0.02	-1.31	46.3	1922.16	0.02	-1.30	47.2
1922.16	0.02	-1.29	48.2	1922.15	0.02	-1.28	49.1	1922.15	0.02	-1.27	50.0
1922.15	0.02	-1.29	50.9	1922.16	0.02	-1.30	51.8	1922.16	0.02	-1.32	52.7
1922.17	0.02	-1.33	53.6	1922.17	0.02	-1.35	54.5	1922.18	0.02	-1.36	55.4
1922.18	0.02	-1.38	56.3	1922.18	0.02	-1.40	57.2	1922.23	0.02	-1.37	58.1
1922.31	0.02	-1.32	59.0	1922.39	0.02	-1.27	59.9	1922.48	0.02	-1.21	60.8
1922.56	0.02	-1.16	61.7	1922.64	0.01	-1.12	62.6	1922.70	0.01	-1.09	63.4
1922.75	0.01	-1.07	64.3	1922.78	0.01	-1.07	65.2	1922.76	0.01	-1.12	66.1
1922.77	0.01	-1.15	67.0	1922.78	0.01	-1.27	68.0	1922.76	0.01	-1.41	69.0
1922.78	0.01	-1.51	69.8	1922.77	0.01	-1.65	70.9	1922.80	0.00	-1.64	72.1
1923.10	-0.02	-1.37	72.5	1923.76	0.00	-0.73	73.5	1923.77	0.00	-0.74	74.4
1923.77	0.00	-0.77	75.1	1923.86	0.00	-0.70	76.4	1924.00	0.00	-0.59	76.7
1924.52	0.00	-0.09	77.7	1924.59	0.00	-0.04	78.6	1924.66	0.00	0.00	79.5
1924.68	0.00	0.00	80.5	1924.71	0.00	0.00	81.4	1924.73	0.00	0.00	82.4
1924.75	0.00	0.00	83.3	1924.78	0.00	0.00	84.3	1924.80	0.00	0.00	85.2
1924.82	0.00	0.00	86.2	1924.85	0.00	0.00	87.1	1924.87	0.00	0.00	88.1
1924.90	0.00	0.00	89.0	1924.95	0.00	0.00	90.0				

## ID

10 SECTION 164.00 TIME = 30.03 HRS WS =1921.79 WIDTH = 43.6

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1924.08	0.00	0.00	10.0	1924.06	0.00	0.00	10.9	1924.05	0.00	0.00	11.9
1924.03	0.00	0.00	12.8	1924.02	0.00	0.00	13.8	1924.00	0.00	0.00	14.7
1923.99	0.00	0.00	15.7	1923.97	0.00	0.00	16.6	1923.96	0.00	0.00	17.6
1923.94	0.00	0.00	18.6	1923.93	0.00	0.00	19.5	1923.91	0.00	0.00	20.5
1923.90	0.00	0.00	21.4	1923.88	0.00	0.00	22.4	1923.87	0.00	0.00	23.3
1923.85	0.00	0.00	24.3	1923.84	0.00	0.00	25.2	1923.17	0.00	-0.65	26.2
1922.48	0.00	-1.33	27.1	1921.83	0.00	-1.97	28.0	1921.72	0.00	-2.06	28.2

1921.66	0.00	-1.78	29.3	1921.66	0.00	-1.44	29.8	1921.65	0.00	-1.11	30.4
1921.65	0.00	-0.77	32.2	1921.64	0.00	-0.44	33.0	1921.64	0.00	-0.39	33.8
1921.62	0.00	-0.36	34.7	1921.56	-0.01	-0.37	35.5	1921.48	-0.01	-0.40	36.3
1921.40	-0.01	-0.43	37.2	1921.31	-0.01	-0.48	38.0	1921.18	-0.02	-0.58	38.9
1921.11	-0.02	-0.64	39.8	1921.06	-0.02	-0.67	40.8	1921.02	-0.02	-0.70	41.7
1921.00	-0.02	-0.70	42.6	1920.99	-0.02	-0.70	43.5	1920.98	-0.02	-0.69	44.5
1920.98	-0.02	-0.68	45.4	1920.97	-0.02	-0.67	46.3	1920.97	-0.03	-0.66	47.2
1920.96	-0.03	-0.65	48.2	1920.96	-0.03	-0.64	49.1	1920.95	-0.03	-0.63	50.0
1920.96	-0.03	-0.64	50.9	1920.96	-0.03	-0.65	51.8	1920.97	-0.03	-0.67	52.7
1920.97	-0.02	-0.68	53.6	1920.98	-0.02	-0.69	54.5	1920.98	-0.02	-0.71	55.5
1920.99	-0.02	-0.72	56.4	1921.00	-0.02	-0.72	57.3	1921.02	-0.02	-0.72	58.2
1921.05	-0.02	-0.71	59.1	1921.10	-0.02	-0.68	60.0	1921.16	-0.02	-0.66	60.9
1921.28	-0.01	-0.58	61.8	1921.38	-0.01	-0.52	62.6	1921.47	-0.01	-0.46	63.5
1921.55	-0.01	-0.42	64.4	1921.52	-0.01	-0.48	65.2	1921.55	-0.01	-0.50	66.1
1921.54	-0.01	-0.54	67.0	1921.53	-0.01	-0.92	67.7	1921.54	-0.01	-1.28	69.6
1921.55	-0.01	-1.66	70.2	1921.61	0.00	-1.97	71.4	1921.81	0.00	-1.80	71.7
1921.95	0.00	-1.67	71.9	1922.63	0.00	-1.02	72.9	1923.32	0.00	-0.36	73.8
1923.70	0.00	0.00	74.8	1923.72	0.00	0.00	75.7	1923.75	0.00	0.00	76.7
1923.77	0.00	0.00	77.6	1923.79	0.00	0.00	78.6	1923.82	0.00	0.00	79.5
1923.84	0.00	0.00	80.5	1923.87	0.00	0.00	81.4	1923.89	0.00	0.00	82.4
1923.91	0.00	0.00	83.3	1923.94	0.00	0.00	84.3	1923.96	0.00	0.00	85.2
1923.98	0.00	0.00	86.2	1924.01	0.00	0.00	87.1	1924.03	0.00	0.00	88.1
1924.06	0.00	0.00	89.0	1924.08	0.00	0.00	90.0				

ID  
9 SECTION 163.00 TIME = 30.03 HRS WS =1920.69 WIDTH = 46.7

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1922.74	0.00	0.00	10.0	1922.69	0.00	0.00	10.9	1922.64	0.00	0.00	11.9
1922.59	0.00	0.00	12.8	1922.54	0.00	0.00	13.8	1922.49	0.00	0.00	14.7
1922.44	0.00	0.00	15.7	1922.39	0.00	0.00	16.6	1922.34	0.00	0.00	17.6
1922.29	0.00	0.00	18.6	1922.24	0.00	0.00	19.5	1922.19	0.00	0.00	20.5
1922.14	0.00	0.00	21.4	1922.09	0.00	0.00	22.4	1921.98	0.00	-0.06	23.3
1921.28	0.00	-0.70	24.3	1920.84	0.00	-1.10	24.9	1920.59	0.00	-1.30	25.2
1920.53	0.01	-1.31	25.9	1920.48	0.01	-1.31	27.1	1920.48	0.01	-1.26	28.2
1920.48	0.01	-0.96	28.9	1920.48	0.01	-0.66	30.0	1920.47	0.01	-0.37	31.2
1920.46	0.01	-0.07	32.2	1920.47	0.01	0.23	33.0	1920.46	0.01	0.27	33.8
1920.45	0.01	0.31	34.7	1920.46	0.01	0.37	35.5	1920.37	0.01	0.33	36.3
1920.33	0.01	0.34	37.2	1920.29	0.01	0.35	38.0	1920.24	0.01	0.32	38.9
1920.18	0.01	0.27	39.8	1920.12	0.01	0.22	40.8	1920.08	0.01	0.20	41.7
1920.04	0.01	0.18	42.6	1920.01	0.01	0.16	43.5	1919.97	0.01	0.14	44.5
1919.93	0.01	0.12	45.4	1919.89	0.01	0.09	46.3	1919.85	0.01	0.07	47.2
1919.85	0.01	0.08	48.2	1919.84	0.01	0.09	49.1	1919.84	0.01	0.09	50.0
1919.84	0.01	0.08	50.9	1919.85	0.01	0.07	51.8	1919.85	0.01	0.06	52.7
1919.89	0.01	0.08	53.6	1919.93	0.01	0.10	54.5	1919.97	0.01	0.12	55.5
1920.00	0.01	0.14	56.4	1920.04	0.01	0.15	57.3	1920.07	0.01	0.17	58.2
1920.11	0.01	0.19	59.1	1920.17	0.01	0.23	60.0	1920.23	0.01	0.25	60.9
1920.28	0.01	0.26	61.8	1920.27	0.01	0.22	62.6	1920.27	0.01	0.18	63.5
1920.28	0.01	0.15	64.4	1920.28	0.01	0.11	65.2	1920.27	0.01	0.07	66.1
1920.27	0.01	0.04	67.0	1920.27	0.01	-0.47	68.4	1920.28	0.01	-0.96	69.5
1920.28	0.01	-1.46	70.0	1920.29	0.01	-1.95	71.2	1920.71	0.00	-1.55	71.9
1920.95	0.00	-1.34	72.2	1921.43	0.00	-0.88	72.9	1922.12	0.00	-0.21	73.8
1922.36	0.00	0.00	74.8	1922.38	0.00	0.00	75.7	1922.41	0.00	0.00	76.7
1922.43	0.00	0.00	77.6	1922.45	0.00	0.00	78.6	1922.48	0.00	0.00	79.5
1922.50	0.00	0.00	80.5	1922.53	0.00	0.00	81.4	1922.55	0.00	0.00	82.4
1922.57	0.00	0.00	83.3	1922.60	0.00	0.00	84.3	1922.62	0.00	0.00	85.2
1922.64	0.00	0.00	86.2	1922.67	0.00	0.00	87.1	1922.69	0.00	0.00	88.1
1922.72	0.00	0.00	89.0	1922.74	0.00	0.00	90.0				

ID  
8 SECTION 162.00 TIME = 30.03 HRS WS =1918.69 WIDTH = 43.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1920.39	0.00	0.00	10.0	1920.38	0.00	0.00	10.9	1920.37	0.00	0.00	11.9
1920.36	0.00	0.00	12.8	1920.35	0.00	0.00	13.8	1920.34	0.00	0.00	14.7
1920.33	0.00	0.00	15.7	1920.32	0.00	0.00	16.6	1920.31	0.00	0.00	17.6
1920.30	0.00	0.00	18.6	1920.29	0.00	0.00	19.5	1920.28	0.00	0.00	20.5
1920.27	0.00	0.00	21.4	1920.26	0.00	0.00	22.4	1920.25	0.00	0.00	23.3
1920.24	0.00	0.00	24.3	1919.84	0.00	-0.39	25.2	1919.15	0.00	-1.07	26.2
1918.79	0.00	-1.42	26.6	1918.65	-0.01	-1.55	26.8	1918.63	0.00	-1.56	27.5
1918.59	0.00	-1.25	28.8	1918.57	0.00	-0.90	29.9	1918.55	0.00	-0.56	30.5
1918.54	0.00	-0.21	32.1	1918.54	0.00	0.15	33.0	1918.54	0.00	0.21	33.8
1918.54	0.00	0.27	34.6	1918.45	0.00	0.24	35.4	1918.36	0.00	0.21	36.2
1918.25	0.00	0.16	37.0	1918.10	0.00	0.02	37.9	1917.99	0.00	-0.07	38.9
1917.96	0.00	-0.09	39.8	1917.93	0.00	-0.10	40.7	1917.90	0.00	-0.11	41.6
1917.88	0.00	-0.12	42.6	1917.88	0.00	-0.11	43.5	1917.88	0.00	-0.09	44.4
1917.88	0.00	-0.08	45.4	1917.88	0.00	-0.07	46.3	1917.88	0.00	-0.05	47.2
1917.88	0.00	-0.04	48.1	1917.88	0.00	-0.03	49.1	1917.88	0.00	-0.02	50.0
1917.88	0.00	-0.03	50.9	1917.88	0.00	-0.05	51.8	1917.88	0.00	-0.07	52.7
1917.88	0.00	-0.09	53.6	1917.88	0.00	-0.10	54.5	1917.88	0.00	-0.12	55.5
1917.88	0.00	-0.14	56.4	1917.88	0.00	-0.15	57.3	1917.90	0.00	-0.16	58.2
1917.93	0.00	-0.15	59.1	1917.95	0.00	-0.14	60.0	1917.98	0.00	-0.15	60.9
1918.04	0.00	-0.13	61.8	1918.19	0.00	-0.01	62.6	1918.32	0.00	0.08	63.5
1918.37	0.00	0.10	64.4	1918.37	-0.02	0.06	65.2	1918.39	0.00	0.04	66.1
1918.39	0.00	0.00	67.4	1918.37	0.00	-0.64	68.6	1918.40	-0.01	-1.24	70.0
1918.69	-0.01	-1.58	70.4	1918.85	0.00	-2.04	70.6	1919.15	0.00	-1.77	71.0
1919.84	0.00	-1.10	71.9	1920.53	0.00	-0.43	72.9	1920.99	0.00	0.00	73.8
1921.01	0.00	0.00	74.8	1921.03	0.00	0.00	75.7	1921.06	0.00	0.00	76.7
1921.08	0.00	0.00	77.6	1921.10	0.00	0.00	78.6	1921.13	0.00	0.00	79.5
1921.15	0.00	0.00	80.5	1921.18	0.00	0.00	81.4	1921.20	0.00	0.00	82.4
1921.22	0.00	0.00	83.3	1921.25	0.00	0.00	84.3	1921.27	0.00	0.00	85.2
1921.29	0.00	0.00	86.2	1921.32	0.00	0.00	87.1	1921.34	0.00	0.00	88.1
1921.37	0.00	0.00	89.0	1921.39	0.00	0.00	90.0				

ID  
7 SECTION 161.00 TIME = 30.03 HRS WS =1917.39 WIDTH = 45.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
1918.06	0.00	0.00	10.0	1918.08	0.00	0.00	10.9	1918.10	0.00	0.00	11.9
1918.13	0.00	0.00	12.8	1918.15	0.00	0.00	13.8	1918.18	0.00	0.00	14.7
1918.20	0.00	0.00	15.7	1918.23	0.00	0.00	16.6	1918.25	0.00	0.00	17.6
1918.28	0.00	0.00	18.6	1918.30	0.00	0.00	19.5	1918.33	0.00	0.00	20.5
1918.35	0.00	0.00	21.4	1918.38	0.00	0.00	22.4	1917.74	0.00	-0.66	23.3
1917.65	0.00	-0.78	23.6	1917.42	0.00	-1.03	24.4	1917.34	0.01	-1.13	25.1
1917.25	0.00	-1.25	26.4	1917.24	0.00	-1.28	27.5	1917.23	0.00	-1.32	28.3
1917.26	0.00	-0.88	29.3	1917.26	0.00	-0.49	30.1	1917.22	0.00	-0.13	31.0
1917.21	0.00	0.26	32.2	1917.21	0.00	0.66	33.0	1917.20	0.00	0.71	33.8
1917.23	0.00	0.80	34.6	1917.18	0.00	0.81	35.4	1917.22	0.00	0.91	36.2
1917.13	0.00	0.88	37.0	1916.97	0.00	0.73	37.9	1916.90	-0.01	0.68	38.9
1916.82	-0.01	0.61	39.8	1916.73	-0.01	0.54	40.7	1916.65	-0.01	0.47	41.6
1916.61	-0.01	0.44	42.6	1916.57	-0.01	0.42	43.5	1916.53	-0.01	0.40	44.4
1916.49	-0.01	0.37	45.4	1916.47	-0.01	0.36	46.3	1916.47	-0.01	0.38	47.2
1916.47	-0.01	0.39	48.1	1916.47	-0.01	0.40	49.1	1916.47	-0.01	0.41	50.0
1916.47	-0.01	0.40	50.9	1916.47	-0.01	0.38	51.8	1916.47	-0.01	0.37	52.8
1916.47	-0.01	0.35	53.7	1916.49	-0.01	0.35	54.6	1916.53	-0.01	0.38	55.5
1916.57	-0.01	0.40	56.4	1916.61	-0.01	0.42	57.3	1916.64	-0.01	0.44	58.3
1916.72	-0.01	0.50	59.2	1916.81	-0.01	0.58	60.1	1916.89	-0.01	0.64	61.0
1916.95	0.00	0.66	61.9	1917.06	0.00	0.72	62.7	1917.25	0.00	0.87	63.6
1917.36	0.00	0.93	64.4	1917.36	0.00	0.90	65.3	1917.36	0.00	0.85	66.1
1917.36	0.00	0.81	66.9	1917.37	0.00	0.20	68.3	1917.37	0.00	-0.43	69.2
1917.39	0.00	-1.04	70.0	1917.43	0.00	-1.62	71.5	1917.56	0.00	-1.54	71.7

1917.71	0.00	-1.44	71.9	1918.40	0.00	-0.79	72.9	1919.09	0.00	-0.15	73.8
1919.29	0.00	0.00	74.8	1919.34	0.00	0.00	75.7	1919.38	0.00	0.00	76.7
1919.43	0.00	0.00	77.6	1919.48	0.00	0.00	78.6	1919.53	0.00	0.00	79.5
1919.57	0.00	0.00	80.5	1919.62	0.00	0.00	81.4	1919.67	0.00	0.00	82.4
1919.72	0.00	0.00	83.3	1919.76	0.00	0.00	84.3	1919.81	0.00	0.00	85.2
1919.86	0.00	0.00	86.2	1919.91	0.00	0.00	87.1	1919.95	0.00	0.00	88.1
1920.00	0.00	0.00	89.0	1920.05	0.00	0.00	90.0				

ID  
6 SECTION 160.00 TIME = 30.03 HRS WS =1915.39 WIDTH = 34.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1916.21	0.00	0.00	10.0	1916.18	0.00	0.00	10.9	1916.16	0.00	0.00	11.9
1916.13	0.00	0.00	12.8	1916.11	0.00	0.00	13.8	1916.08	0.00	0.00	14.7
1916.06	0.00	0.00	15.7	1916.03	0.00	0.00	16.6	1916.01	0.00	0.00	17.6
1916.00	0.02	18.6	1915.96	0.00	0.00	19.5	1915.95	0.00	0.02	20.5	
1915.95	0.00	0.04	21.4	1915.90	0.00	0.02	22.3	1915.88	0.00	0.02	23.3
1915.86	0.00	0.02	24.3	1915.85	0.00	0.04	25.2	1915.60	0.00	-0.19	26.1
1915.56	0.00	-0.20	26.5	1915.49	0.00	-0.25	27.6	1915.48	0.00	-0.23	28.4
1915.47	0.00	-0.04	29.5	1915.47	0.00	0.16	30.5	1915.47	0.00	0.36	31.4
1915.15	0.02	0.25	32.0	1915.47	0.00	0.76	33.0	1915.11	0.00	0.47	33.5
1915.12	0.00	0.56	34.5	1915.13	0.00	0.65	35.2	1915.11	0.00	0.70	36.0
1915.12	0.00	0.72	36.9	1914.99	-0.01	0.61	37.9	1914.83	-0.01	0.46	38.8
1914.77	-0.01	0.41	39.7	1914.72	-0.01	0.37	40.7	1914.68	-0.01	0.35	41.6
1914.66	-0.01	0.34	42.5	1914.66	-0.01	0.36	43.5	1914.66	-0.01	0.37	44.4
1914.66	-0.01	0.38	45.3	1914.66	-0.01	0.39	46.3	1914.65	-0.01	0.40	47.2
1914.65	-0.01	0.42	48.1	1914.65	-0.01	0.43	49.1	1914.65	-0.01	0.44	50.0
1914.65	-0.01	0.43	50.9	1914.65	-0.01	0.41	51.8	1914.65	-0.01	0.40	52.8
1914.66	-0.01	0.38	53.7	1914.66	-0.01	0.37	54.6	1914.66	-0.01	0.36	55.5
1914.66	-0.01	0.34	56.5	1914.66	-0.01	0.33	57.4	1914.67	-0.01	0.33	58.3
1914.71	-0.01	0.35	59.2	1914.76	-0.01	0.38	60.2	1914.82	-0.01	0.42	61.1
1914.97	-0.01	0.56	62.0	1915.09	0.00	0.62	62.8	1915.10	0.00	0.59	63.7
1915.11	0.00	0.55	64.5	1915.11	0.00	0.50	65.3	1915.13	0.02	0.47	66.4
1915.48	0.00	0.77	67.0	1915.47	0.00	0.51	67.8	1915.47	0.00	0.26	68.5
1915.47	0.00	0.01	69.6	1915.47	0.00	-0.24	70.5	1915.48	0.00	-0.25	71.4
1915.53	0.00	-0.23	72.5	1915.60	0.00	-0.18	72.9	1915.85	0.00	0.04	73.8
1915.85	0.00	0.02	74.7	1915.87	0.00	0.02	75.7	1915.88	0.00	0.00	76.6
1915.90	0.00	0.00	77.6	1915.95	0.00	0.02	78.6	1915.95	0.00	0.00	79.5
1915.97	0.00	0.00	80.5	1916.01	0.00	0.01	81.4	1916.02	0.00	0.00	82.4
1916.04	0.00	0.00	83.3	1916.07	0.00	0.00	84.3	1916.09	0.00	0.00	85.2
1916.11	0.00	0.00	86.2	1916.14	0.00	0.00	87.1	1916.16	0.00	0.00	88.1
1916.19	0.00	0.00	89.0	1916.21	0.00	0.00	90.0				

ID  
5 SECTION 159.00 TIME = 30.03 HRS WS =1912.19 WIDTH = 37.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1914.87	0.00	0.00	10.0	1914.84	0.00	0.00	10.9	1914.82	0.00	0.00	11.9
1914.79	0.00	0.00	12.8	1914.77	0.00	0.00	13.8	1914.74	0.00	0.00	14.7
1914.72	0.00	0.00	15.7	1914.69	0.00	0.00	16.6	1914.67	0.00	0.00	17.6
1914.64	0.00	0.00	18.6	1914.62	0.00	0.00	19.5	1914.59	0.00	0.00	20.5
1914.57	0.00	0.00	21.4	1914.54	0.00	0.00	22.4	1914.52	0.00	0.00	23.3
1914.49	0.00	0.00	24.3	1914.47	0.00	0.00	25.2	1914.44	0.00	0.00	26.2
1913.89	0.00	-0.53	27.1	1913.20	0.00	-1.20	28.1	1912.52	0.00	-1.85	29.0
1912.37	0.00	-1.70	29.2	1912.26	0.00	-1.51	29.4	1912.26	0.00	-1.21	30.6
1912.16	0.00	-1.00	32.2	1912.16	0.00	-0.71	33.0	1912.16	0.00	-0.63	33.8
1912.07	0.01	-0.65	34.5	1911.96	0.01	-0.68	35.2	1911.84	0.01	-0.73	36.0
1911.72	0.01	-0.83	36.9	1911.66	0.01	-0.88	37.9	1911.60	0.01	-0.93	38.8
1911.53	0.01	-0.99	39.7	1911.47	0.02	-1.03	40.7	1911.47	0.02	-1.02	41.6
1911.47	0.02	-1.01	42.5	1911.47	0.02	-1.00	43.5	1911.47	0.02	-0.98	44.4

	Z	DZ	TDZ	Y		Z	DZ	TDZ	Y		Z	DZ	TDZ	Y	
1911.47	0.02	-0.97	45.3	1911.47	0.02	-0.95	46.3	1911.47	0.02	-0.94	47.2				
1911.47	0.02	-0.93	48.1	1911.47	0.02	-0.91	49.1	1911.47	0.02	-0.90	50.0				
1911.47	0.02	-0.91	50.9	1911.47	0.02	-0.93	51.9	1911.47	0.02	-0.94	52.8				
1911.47	0.02	-0.96	53.7	1911.47	0.02	-0.97	54.6	1911.47	0.02	-0.99	55.6				
1911.47	0.02	-1.00	56.5	1911.47	0.02	-1.01	57.4	1911.47	0.02	-1.03	58.4				
1911.47	0.02	-1.04	59.3	1911.52	0.01	-1.00	60.2	1911.59	0.01	-0.95	61.1				
1911.66	0.01	-0.90	62.1	1911.72	0.01	-0.85	63.0	1911.81	0.01	-0.82	63.8				
1911.94	0.01	-0.75	64.6	1912.05	0.01	-0.69	65.4	1912.12	0.01	-0.69	66.2				
1912.10	0.01	-0.77	67.0	1912.13	0.00	-1.12	68.2	1912.26	0.00	-1.36	70.1				
1912.36	0.00	-1.63	70.4	1912.51	0.00	-1.86	70.6	1912.79	0.00	-1.61	71.0				
1913.48	0.00	-0.94	71.9	1914.17	0.00	-0.27	72.9	1914.47	0.00	0.00	73.8				
1914.49	0.00	0.00	74.8	1914.51	0.00	0.00	75.7	1914.54	0.00	0.00	76.7				
1914.56	0.00	0.00	77.6	1914.58	0.00	0.00	78.6	1914.61	0.00	0.00	79.5				
1914.63	0.00	0.00	80.5	1914.66	0.00	0.00	81.4	1914.68	0.00	0.00	82.4				
1914.70	0.00	0.00	83.3	1914.73	0.00	0.00	84.3	1914.75	0.00	0.00	85.2				
1914.77	0.00	0.00	86.2	1914.80	0.00	0.00	87.1	1914.82	0.00	0.00	88.1				
1914.85	0.00	0.00	89.0	1914.87	0.00	0.00	90.0								

## ID

4 SECTION 158.00 TIME = 30.03 HRS WS = 1910.39 WIDTH = 32.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1913.53	0.00	0.00	10.0	1913.51	0.00	0.00	10.9	1913.48	0.00	0.00	11.9				
1913.45	0.00	0.00	12.8	1913.43	0.00	0.00	13.8	1913.40	0.00	0.00	14.7				
1913.38	0.00	0.00	15.7	1913.35	0.00	0.00	16.6	1913.33	0.00	0.00	17.6				
1913.30	0.00	0.00	18.6	1913.28	0.00	0.00	19.5	1913.25	0.00	0.00	20.5				
1913.23	0.00	0.00	21.4	1913.20	0.00	0.00	22.4	1913.18	0.00	0.00	23.3				
1913.15	0.00	0.00	24.3	1913.13	0.00	0.00	25.2	1913.10	0.00	0.00	26.2				
1913.08	0.00	0.00	27.1	1912.59	0.00	-0.46	28.1	1911.90	0.00	-1.13	29.0				
1911.66	0.00	-0.97	29.3	1911.44	0.00	-0.79	29.7	1911.09	0.00	-0.74	30.4				
1910.80	0.00	-0.63	31.1	1910.08	0.01	-0.95	32.8	1910.03	-0.01	-0.90	33.7				
1910.03	-0.01	-0.80	34.4	1910.03	-0.01	-0.70	35.0	1910.02	-0.01	-0.70	36.0				
1910.01	-0.01	-0.69	36.9	1910.02	-0.01	-0.67	37.8	1909.86	-0.01	-0.82	38.8				
1909.70	-0.01	-0.96	39.7	1909.69	-0.01	-0.96	40.6	1909.68	-0.01	-0.96	41.6				
1909.67	-0.02	-0.96	42.5	1909.66	-0.02	-0.96	43.4	1909.65	-0.02	-0.96	44.4				
1909.64	-0.02	-0.95	45.3	1909.64	-0.02	-0.94	46.2	1909.63	-0.02	-0.94	47.2				
1909.63	-0.02	-0.93	48.1	1909.62	-0.02	-0.92	49.1	1909.62	-0.02	-0.91	50.0				
1909.62	-0.02	-0.92	50.9	1909.63	-0.02	-0.93	51.9	1909.63	-0.02	-0.94	52.8				
1909.64	-0.02	-0.95	53.7	1909.64	-0.02	-0.95	54.7	1909.65	-0.02	-0.96	55.6				
1909.66	-0.02	-0.97	56.5	1909.67	-0.02	-0.97	57.5	1909.68	-0.01	-0.97	58.4				
1909.69	-0.01	-0.97	59.3	1909.70	-0.01	-0.97	60.3	1909.85	-0.01	-0.84	61.2				
1910.18	0.00	-0.52	62.1	1910.26	0.00	-0.46	63.0	1910.27	0.01	-0.46	63.9				
1910.40	0.00	-0.40	65.1	1910.42	0.00	-0.46	65.5	1910.81	0.00	-0.15	66.3				
1910.90	0.00	-0.13	67.5	1911.20	0.00	-0.34	68.4	1911.46	0.00	-0.57	69.3				
1911.54	0.00	-0.99	69.8	1911.64	0.00	-1.38	70.1	1912.28	0.00	-0.77	71.0				
1912.97	0.00	-0.10	71.9	1913.10	0.00	0.00	72.9	1913.13	0.00	0.00	73.8				
1913.15	0.00	0.00	74.8	1913.17	0.00	0.00	75.7	1913.20	0.00	0.00	76.7				
1913.22	0.00	0.00	77.6	1913.24	0.00	0.00	78.6	1913.27	0.00	0.00	79.5				
1913.29	0.00	0.00	80.5	1913.32	0.00	0.00	81.4	1913.34	0.00	0.00	82.4				
1913.36	0.00	0.00	83.3	1913.39	0.00	0.00	84.3	1913.41	0.00	0.00	85.2				
1913.43	0.00	0.00	86.2	1913.46	0.00	0.00	87.1	1913.48	0.00	0.00	88.1				
1913.51	0.00	0.00	89.0	1913.53	0.00	0.00	90.0								

## ID

3 SECTION 157.00 TIME = 30.03 HRS WS = 1909.20 WIDTH = 32.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
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1912.68	0.00	0.00	10.0	1912.63	0.00	0.00	10.9	1912.58	0.00	0.00	11.9				
1912.53	0.00	0.00	12.8	1912.48	0.00	0.00	13.8	1912.43	0.00	0.00	14.7				
1912.38	0.00	0.00	15.7	1912.33	0.00	0.00	16.6	1912.28	0.00	0.00	17.6				

1912.23	0.00	0.00	18.6	1912.18	0.00	0.00	19.5	1912.13	0.00	0.00	20.5
1912.08	0.00	0.00	21.4	1912.03	0.00	0.00	22.4	1911.98	0.00	0.00	23.3
1911.93	0.00	0.00	24.3	1911.88	0.00	0.00	25.2	1911.83	0.00	0.00	26.2
1911.51	0.00	-0.27	27.1	1910.81	0.00	-0.91	28.1	1910.26	0.00	-1.42	28.8
1910.20	0.00	-0.98	29.1	1910.15	0.00	-0.53	29.5	1910.09	0.00	-0.09	30.6
1910.02	0.00	0.34	31.2	1909.75	0.00	0.57	33.1	1909.63	0.00	0.55	33.3
1909.59	0.00	0.61	34.1	1909.54	-0.01	0.66	34.7	1909.10	-0.02	0.24	35.3
1909.07	0.01	0.22	35.9	1909.01	0.02	0.17	37.3	1908.99	0.02	0.16	38.5
1909.01	0.02	0.19	39.7	1909.01	0.02	0.20	40.6	1908.85	0.02	0.06	41.6
1908.66	0.03	-0.12	42.5	1908.51	0.03	-0.25	43.4	1908.37	0.03	-0.39	44.4
1908.33	0.04	-0.41	45.3	1908.30	0.04	-0.43	46.2	1908.28	0.04	-0.44	47.2
1908.26	0.04	-0.45	48.1	1908.24	0.04	-0.45	49.1	1908.22	0.04	-0.46	50.0
1908.24	0.04	-0.45	50.9	1908.26	0.04	-0.45	51.9	1908.28	0.04	-0.44	52.8
1908.30	0.04	-0.44	53.7	1908.33	0.04	-0.41	54.7	1908.37	0.03	-0.39	55.6
1908.51	0.03	-0.27	56.5	1908.66	0.03	-0.13	57.5	1908.67	-0.01	-0.13	58.4
1908.66	-0.01	-0.15	59.3	1908.67	-0.01	-0.16	60.3	1908.66	-0.01	-0.18	61.3
1908.67	-0.01	-0.18	62.4	1908.68	-0.01	-0.18	63.1	1908.67	-0.01	-0.21	63.9
1908.68	-0.01	-0.28	65.0	1908.67	-0.01	-0.36	65.8	1908.69	-0.01	-0.41	67.0
1909.54	0.00	0.36	68.3	1909.61	0.00	-0.20	69.1	1909.63	0.00	-0.80	69.7
1909.73	0.00	-1.33	69.9	1910.29	0.00	-1.39	70.7	1910.46	0.00	-1.24	71.0
1911.15	0.00	-0.58	71.9	1911.75	0.00	0.00	72.9	1911.78	0.00	0.00	73.8
1911.80	0.00	0.00	74.8	1911.82	0.00	0.00	75.7	1911.85	0.00	0.00	76.7
1911.87	0.00	0.00	77.6	1911.89	0.00	0.00	78.6	1911.92	0.00	0.00	79.5
1911.94	0.00	0.00	80.5	1911.97	0.00	0.00	81.4	1911.99	0.00	0.00	82.4
1912.01	0.00	0.00	83.3	1912.04	0.00	0.00	84.3	1912.06	0.00	0.00	85.2
1912.08	0.00	0.00	86.2	1912.11	0.00	0.00	87.1	1912.13	0.00	0.00	88.1
1912.16	0.00	0.00	89.0	1912.18	0.00	0.00	90.0				

## ID

2 SECTION 156.00 TIME = 30.03 HRS WS =1906.72 WIDTH = 13.1

Z DZ TDZ Y Z DZ TDZ Y Z DZ TDZ Y

1910.84	0.00	0.00	10.0	1910.79	0.00	0.00	10.9	1910.74	0.00	0.00	11.9
1910.69	0.00	0.00	12.8	1910.64	0.00	0.00	13.8	1910.59	0.00	0.00	14.7
1910.54	0.00	0.00	15.7	1910.49	0.00	0.00	16.6	1910.44	0.00	0.00	17.6
1910.39	0.00	0.00	18.6	1910.34	0.00	0.00	19.5	1910.29	0.00	0.00	20.5
1910.24	0.00	0.00	21.4	1910.19	0.00	0.00	22.4	1910.14	0.00	0.00	23.3
1910.09	0.00	0.00	24.3	1910.04	0.00	0.00	25.2	1909.99	0.00	0.00	26.2
1909.94	0.00	0.00	27.1	1909.89	0.00	0.00	28.1	1909.84	0.00	0.00	29.0
1909.34	0.00	0.00	29.8	1908.84	0.00	0.00	30.6	1908.34	0.00	0.00	31.4
1908.04	0.00	0.20	32.4	1907.91	0.00	0.57	33.5	1907.78	0.00	0.54	34.0
1907.63	0.00	0.49	34.8	1907.51	0.00	0.47	35.3	1907.30	0.00	0.28	36.4
1907.29	0.00	0.27	37.6	1907.27	0.00	0.27	38.5	1907.24	0.00	0.25	39.5
1907.08	0.00	0.10	40.5	1906.95	0.00	-0.01	41.4	1906.92	0.00	-0.03	42.3
1906.74	0.00	-0.20	43.4	1906.41	-0.03	-0.51	43.8	1905.99	-0.01	-0.92	44.4
1905.33	-0.05	-1.57	45.3	1905.33	-0.05	-1.56	46.2	1905.33	-0.05	-1.55	47.2
1905.33	-0.05	-1.54	48.1	1905.33	-0.05	-1.53	49.1	1905.33	-0.05	-1.52	50.0
1905.33	-0.05	-1.53	50.9	1905.33	-0.05	-1.54	51.9	1905.33	-0.05	-1.55	52.8
1905.33	-0.05	-1.56	53.7	1905.33	-0.05	-1.58	54.7	1906.03	0.00	-0.89	55.6
1906.41	-0.03	-0.53	56.1	1906.72	-0.01	-0.22	56.5	1906.92	0.00	-0.04	57.6
1907.05	0.00	0.08	58.6	1907.14	0.00	0.16	59.5	1907.24	0.00	0.24	60.4
1907.27	0.00	0.26	61.5	1907.29	0.00	0.27	62.3	1907.32	0.00	0.28	63.9
1907.51	0.00	0.40	64.3	1907.69	0.00	0.51	65.1	1907.81	0.00	0.54	66.0
1907.94	0.00	0.60	66.6	1908.04	0.00	0.08	67.6	1908.66	0.00	0.07	68.5
1909.20	0.00	-0.01	69.2	1909.75	0.00	-0.09	70.0	1909.89	0.00	0.00	71.0
1909.94	0.00	0.00	71.9	1909.98	0.00	0.00	72.9	1910.03	0.00	0.00	73.8
1910.08	0.00	0.00	74.8	1910.13	0.00	0.00	75.7	1910.17	0.00	0.00	76.7
1910.22	0.00	0.00	77.6	1910.27	0.00	0.00	78.6	1910.32	0.00	0.00	79.5
1910.36	0.00	0.00	80.5	1910.41	0.00	0.00	81.4	1910.46	0.00	0.00	82.4
1910.51	0.00	0.00	83.3	1910.55	0.00	0.00	84.3	1910.60	0.00	0.00	85.2
1910.65	0.00	0.00	86.2	1910.70	0.00	0.00	87.1	1910.74	0.00	0.00	88.1

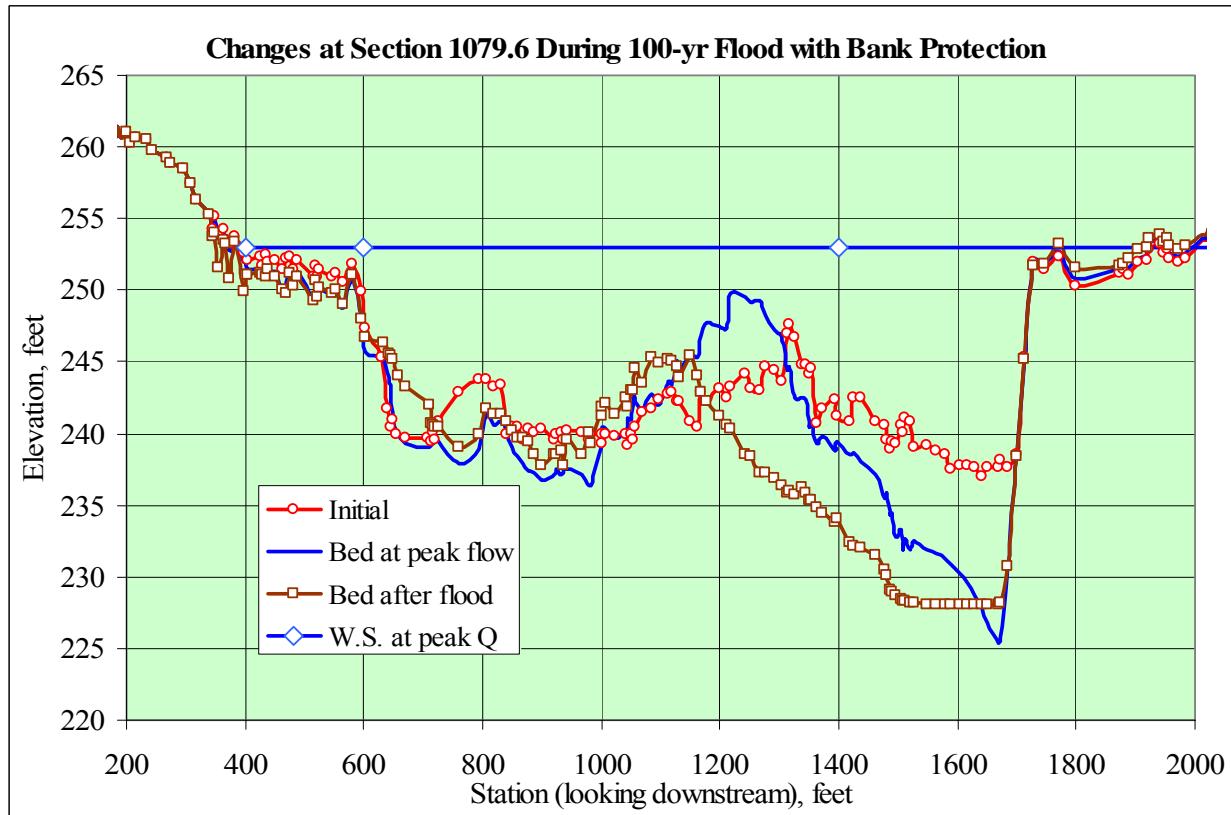
1910.79 0.00 0.00 89.0 1910.84 0.00 0.00 90.0

**Generalized Computer Program**

**FLUVIAL-12**

**Mathematical Model for Erodible Channels**

**Users Manual**



**Updated In January 2006**

**CHANG Consultants**

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## PROGRAM SUMMARY FOR FLUVIAL-12

River channel behavior often needs to be studied for its natural state and response to human regulation. Studies of river hydraulics, sediment transport, and river channel changes may be through physical modeling, or mathematical modeling, or both. Physical modeling has been relied upon traditionally for river projects, but mathematical modeling is becoming more popular as its capabilities expand rapidly. The computer program FLUVIAL-12 is a mathematical model that is formulated and developed for water and sediment routing in natural and man-made channels. The combined effects of flow hydraulics, sediment transport and river channel changes are simulated for a given flow period.

River channels changes simulated by the model include channel bed scour and fill (or aggradation and degradation), width variation, and changes in bed topography induced by the curvature effect. These inter-related changes are coupled in the model for each time step. While this model is for erodible channels, physical constraints, such as bank protection, grade-control structures and bedrock outcroppings, may also be specified. Applications of this model include evaluations of general scour at bridge crossings, sediment delivery, channel responses to sand and gravel mining, channelization, etc. It has been applied to many designs for bank protection and grade-control structures which must extended below the potential channel bed scour and withstand the design flood.

This model is applicable to ephemeral rivers as well as rivers with long-term flow; it has also been tested and calibrated with field data from several rivers, in both semi-arid and humid regions. Because of the transient behavior in dynamic changes, ephemeral rivers require more complicated techniques in model formulation. This model may be used on any main frame computer; it may be used on a personal computer with adequate capacity.

The FLUVIAL-12 model is an *erodible-boundary model*; it simulated inter-related changes in channel-bed profile, channel width and bed topography induced by the channel curvature. The erodible-boundary model is different from an *erodible-bed model* in the following ways.

- (1) An erodible-bed model does not simulate changes in channel width. Since changes in channel-bed profile is closely related to changes in width, these changes may not be separated.
- (2) The change in bed profile in an erodible-bed model is assumed to be uniform in the erodible zone. All points adjust up and down by an equal amount during aggradation and degradation. Actual bed changes are by no means uniform and therefore they may not be simulated by an erodible-bed model.
- (3) An erodible-bed model does not consider the channel curvature. In reality, the bed topography is highly non-uniform in a curved channel, especially during a high flow.
- (4) The erodible zone needs to be specified at all cross sections in an erodible-bed model. This means the model does not provide the extent of erosion in the channel, but the user has to inform the model about the erodible part of the channel bed. The boundary of erosion is computed and provided by the FLUVIAL-12 model, this boundary changes with the discharge and time.
- (5) Sediment inflow into the channel reaches needs to be specified for many other models. This

requires the sediment rating curve which is usually not available for stream channels. In the FLUVIAL-12 model, the sediment inflow may be specified and it may also be computed based on the hydraulics of flow at the upstream section at every time step.

(6) The FLUVIAL-12 has been calibrated using many sets of river data (see Section XI). An erodible-bed model may not be calibrated with field data of natural streams.

Development of the FLUVIAL computer model dates back to 1972. Several publications describing the physical foundation, analytical background, and applications are included in this manual. Publications documenting the successive stages of development and calibration of the model are listed below.

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## I. INTRODUCTION

Alluvial rivers are self-regulatory in that they adjust their characteristics in response to any change in the environment. These environmental changes may occur naturally, as in the case of climatic variation or changes in vegetative cover, or may be a result of such human activities as damming, river training, diversion, sand and gravel mining, channelization, bank protection, and bridge and highway construction. Such changes distort the natural quasi-equilibrium of a river; in the process of restoring the equilibrium, the river will adjust to the new conditions by changing its slope, roughness, bed-material size, cross-sectional shape, or meandering pattern. Within the existing constraints, any one or a combination of these characteristics may adjust as the river seeks to maintain the balance between its ability to transport and the load provided.

River channel behavior often needs to be studied for its natural state and responses to the aforementioned human activities. Studies of river hydraulics, sediment transport and river channel changes may be through physical modeling or mathematical modeling, or both. Physical modeling has been relied upon traditionally to obtain the essential design information. It nevertheless often involves large expenditure and is time consuming in model construction and experimentation. What limits the accuracy of physical modeling is the scale distortion which is almost unavoidable whenever it involves sedimentation.

Mathematical modeling of erodible channels has been advanced with the progress in the physics of fluvial processes and computer techniques. An evaluation of existing models was made by the National Academy of Sciences (1983). Recommendations in this report have been beneficial for subsequent model development. Since the actual size of a river is employed in mathematical modeling, there is no scale distortion. The applicability and accuracy of a model depend on the physical foundation and numerical techniques employed.

The traditional regime analyses of rivers are limited to regime rivers and their long-term adjustments in equilibrium. The hydraulic geometry, flow and sediment transport processes exhibited in the process of adjustments are outside the scope of regime approach but they are included in the mathematical modeling. This manual addresses the more rapid process-response or the transient behavior of alluvial rivers. The subject is on unsteady flow and sediment transport in river channels with a changing boundary under given physical constraints. In the following, the physical foundation and numerical techniques for the transient process-response of the FLUVIAL model are described. Users' instructions are provided. Applications of the FLUVIAL model are illustrated by examples given in the appendixes.

## II. PHYSICAL FOUNDATION OF FLUVIAL PROCESS-RESPONSE

Mathematical modeling of river channel changes requires adequate and sufficient physical relationships for the fluvial processes. While the processes are governed by the principles of continuity, flow resistance, sediment transport and bank stability, such relations are insufficient to explain the time and spatial variations of channel width in an alluvial river. Generally, width adjustment occurs concurrently with changes in river bed profile, slope, channel pattern, roughness, etc. These changes are closely interrelated; they are delicately adjusted to establish or to maintain the dynamic state of equilibrium. While any factor imposed upon the river is usually absorbed by a combination of the above responses. The extent of each type of response is inversely related to the

resistance to change.

The dynamic equilibrium is the direction toward which each river channel evolves. The transient behavior of an alluvial river undergoing changes must reflect its constant adjustment toward dynamic equilibrium, although, under the changing discharge, the true equilibrium may never be attained. For a short river reach of uniform discharge, the conditions for dynamic equilibrium are: (1) Equal sediment discharge along the channel, and (2) uniformity in power expenditure  $\gamma QS$ , where  $\gamma$  is the unit weight of the water-sediment mixture,  $Q$  is the discharge, and  $S$  is the energy gradient. If the energy gradient is approximated by the water-surface slope, then uniform power expenditure or energy gradient is equivalent to the linear (straight-line) water-surface profile along the channel. A river channel undergoing changes usually does not have a linear water-surface profile or uniform sediment discharge, but river channel adjustments are such that the non-uniformities in water-surface profile and sediment discharge are effectively reduced. The rate of adjustment is limited by the rate of sediment movement and subject to the rigid constraints such as grade-control structures, bank protection, abutments, bedrock, etc.

The energy gradient at a river cross section varies wildly. This variable is usually included in a hydraulic computation such as that of a HEC-2 study. The output of any HEC-2 study, even if it is for a fairly uniform river channel, usually exhibits non-uniformity in energy gradient along the channel. This variation is much more pronounced in disturbed rivers. A mathematical modeler realizes that a river channel will change in order to attain stream wise uniformity in sediment load. It is equally important to perceive that it will also adjust toward equal energy gradient along the channel. Because sediment discharge is a direct function of  $\gamma QS$ , channel adjustment in the direction of equal power expenditure also favors the uniformity in sediment discharge. The sediment discharge in the reach will match the inflow rate when the equilibrium is reached.

### III. CHANNEL WIDTH ADJUSTMENTS DURING SCOUR AND FILL

A stream channel's adjustment in the direction of equal power expenditure, or straight water-surface profile, provides the physical basis for the modeling of channel width changes. However, this adjustment does not necessarily mean movement toward uniformity in channel width. For one thing, the power expenditure is also affected by channel roughness and channel-bed elevation, in addition to the width. But, more importantly, the adjustment toward uniformity in power expenditure is frequently accomplished by significant streamwise variation in width. Such spatial width variation generally occurs concurrently with streambed scour or fills to be illustrated in the following by several examples.

The transient behavior can be more clearly demonstrated by more dramatic river channel changes in the short term. Field examples of this nature are selected herein to illustrate how the significant spatial variation in width is related to river channel's adjustment toward uniform power expenditure. This example will also show why the regime approach may not be employed to simulate river channel changes.

Figure 1 shows a short reach of the San Diego River at Lakeside, California on February 25, 1981 during the initial stage of a storm. The estimated discharge of 600 cfs persisted for several subsequent days. Prior to the storm, this sandy streambed was graded, because of sand mining, to a wavy profile. During the initial period of flow, the water-surface profile was not straight because its

gradient was steeper over higher streambed areas than over lower areas. Gradually, these higher streambed areas were scoured while lower places were filled. Small widths formed with streambed scour, whereas large widths developed with fill as shown in the figure. The width development in this case was rapid in occurrence in the sandy material, its significant streamwise variation is depicted by the natural streamlines visible on the water surface. This pattern of significant spatial variation in width actually represents the stream's adjustment toward equal energy gradient, as explained in the following.



Fig. 1 Streamwise variation in width during stream channel adjustment toward establishing straight water-surface profile, San Diego River at Lakeside, California

The streambed area undergoing scour had a steeper energy gradient (or water-surface slope) than its adjacent areas. Formation of a narrower and deeper channel was effective to reduce the energy gradient due to decreased boundary resistance and lowered streambed elevation. In addition, the cross section developed a somewhat circular shape, which conserved power as a result of being closer to the best hydraulic section. On the other hand, the streambed area undergoing fill had a lower streambed elevation and a flatter energy gradient. Channel widening at this area was effective to steepen its energy gradient due to the increasing boundary resistance and rising streambed elevation. In summary, these adjustments in channel width effectively reduced the spatial variation in power expenditure or non-linearity in water-surface profile. Because sediment discharge is a direct function of stream power  $\gamma QS$ , channel adjustment in the direction of equal power expenditure also favors the equilibrium, or uniformity, in sediment discharge.

The significant spatial width variation shown in Fig. 1 was temporary. The small width lasted while streambed scour continued and the large width persisted with sustained fill. At a later

stage when scour and fill ceased, the energy gradient or water-surface slope associated with the small width became flatter than that for the large width. The new profile of energy gradient or water surface became a reversal of the initial profile. Then, the small width started to grow wider while the large width began to slide back into the channel, resulting in a more uniform width along the channel.

The above example illustrates that a regime relationship for channel width may not be used in simulating transient river channel changes. Under the regime relationship, the width is a direct function of the discharge, i.e.,  $B \% Q^{0.5}$ ; but under transient changes, the channel can have very different widths even though the discharge is essentially uniform along the channel.

The characteristic changes in channel width during channel-bed scour and fill were also observed by Andrews (1982) on the East Fork River in Wyoming. This river was in its natural state, undisturbed by human activities. River channel changes were induced by the variation in discharge.

In 1906, the Associated Press filed a well-written report that seemed to end one of the world's most spectacular stories. In the story, the AP reported that the Colorado River flooded; the water moved from the All American Canal to the New River and poured down to the Salton Sea. The sea rose 7 in. per day. The water became a cascade and its force cut back the banks. Soon the bank was receding faster and faster, moving upstream into the valley at a pace of 4000 ft a day; widening the New River channel to a gorge of more than 1000 feet. This example also illustrates the dramatic widening of river channel associated with a rising bed elevation.

A field study by the U. S. Bureau of Reclamation (1963) upstream of Milburn Diversion Dam on the Middle Loup River, central Nebraska also exemplifies the aggradation of a channel and associated channel widening.

The construction of Milburn Diversion Dam was completed in May, 1956 ... By May 1957, two months after the reservoir was impounded for the first irrigation season, the channel had aggraded an average of 1.6 feet, with a rise in the channel thalweg elevation of 2.2 feet; and by October of the same year, the total rise in the streambed averaged 2.2 feet. The cross section obtained in December 1957 shows a continued rise in the thalweg elevation. During the same period, the width of the channel had increased by 70 feet, from 475 feet in 1951 to 545 feet in 1957. One-third of this increase occurred during the June, 1956 - December, 1957 period.

For these two case histories, both alluvial rivers entered reservoirs with a rising base level. The transient changes are characterized by rising channel bed and increasing channel width. Although measurements of the discharge and other parameters are not available, it is possible to describe, at least in trend, the nature of power transformation in the river channel. At the river mouth, the base level was controlled in the reservoir. The rising base level first caused a lower velocity and energy gradient in the river channel near the mouth in relation to its upstream reach. In response to this change, channel adjustments through widening and aggradation near the mouth provided greater flow resistance and power expenditure at this location partly due to the increased boundary resistance. This process resulted in a more uniform power expenditure per unit channel length along the river.

A lowering base level, on the other hand, would result in a higher energy gradient in the river channel near the mouth. The higher energy gradient could be reduced through the development of a narrower and deeper channel at this location. This process would also result in a more uniform power expenditure along the channel. Such morphological features for deltas are also applicable to alluvial fans and hill slopes.

#### **IV. ANALYTICAL BASIS OF THE FLUVIAL MODEL**

The FLUVIAL model with different versions has been developed for water and sediment routing in rivers while simulating river channel changes as documented in a series of publications listed in Section I. River channel changes simulated by the model include channel-bed scour and fill (or aggradation and degradation), width variation, and changes caused by curvature effects. Because changes in channel width and channel-bed profile are closely inter-related, modeling of erodible channels must include both changes. In fact, width changes are usually greater than the concomitant scour and fill in the bed, particularly in ephemeral streams. The analytical background of the FLUVIAL model is described in the following.

The FLUVIAL model has the following five major components: (1) Water routing, (2) sediment routing, (3) changes in channel width, (4) changes in channel-bed profile, and (5) changes in geometry due to curvature effect. These inter-related components are described in the following sections. A flow chart showing the major steps of the computation is given in Fig. 2.

This model employs a space-time domain in which the space domain is represented by the discrete cross sections along the channel; the time domain is represented by discrete time increments. Temporal and spatial variations in flow, sediment transport and channel geometry are computed following an iterative procedure. Water routing, which is coupled with the changing curvature, is assumed to be uncoupled from the sediment processes because sediment movement and changes in channel geometry are slow in comparison to the flow hydraulics.

#### **V. WATER ROUTING**

Water routing provides temporal and spatial variations of the stage, discharge, energy gradient and other hydraulic parameters in the channel. The water routing component has the following three major features: (1) Numerical solution of the continuity and momentum equations for longitudinal flow, (2) evaluation of flow resistance due to longitudinal and transverse flows, and (3) upstream and downstream boundary conditions. The continuity and momentum equations in the longitudinal direction are

$$\frac{\partial A}{\partial t} + \frac{\partial Q}{\partial s} - q = 0 \quad (1)$$

$$\frac{1}{A} \frac{\partial Q}{\partial t} + g \frac{\partial H}{\partial s} + \frac{1}{A} \frac{\partial}{\partial s} \frac{Q^2}{A} + gS - \frac{Q}{A^2} q = 0 \quad (2)$$

where  $Q$  is the discharge,  $A$  is the cross-sectional area of flow,  $t$  is the time,  $s$  is the curvilinear

coordinate along discharge centerline measured from the upstream entrance,  $q$  is the lateral inflow rate per unit length,  $H$  is the stage or water-surface elevation, and  $S$  is the energy gradient. The upstream boundary condition for water routing is the inflow hydrographs; the downstream condition is the stage-discharge relation or the base-level variation. Techniques for numerical solution of Eqs. 1 and 2 are described by Chen (1973) and Fread (1971, 1974), among others.

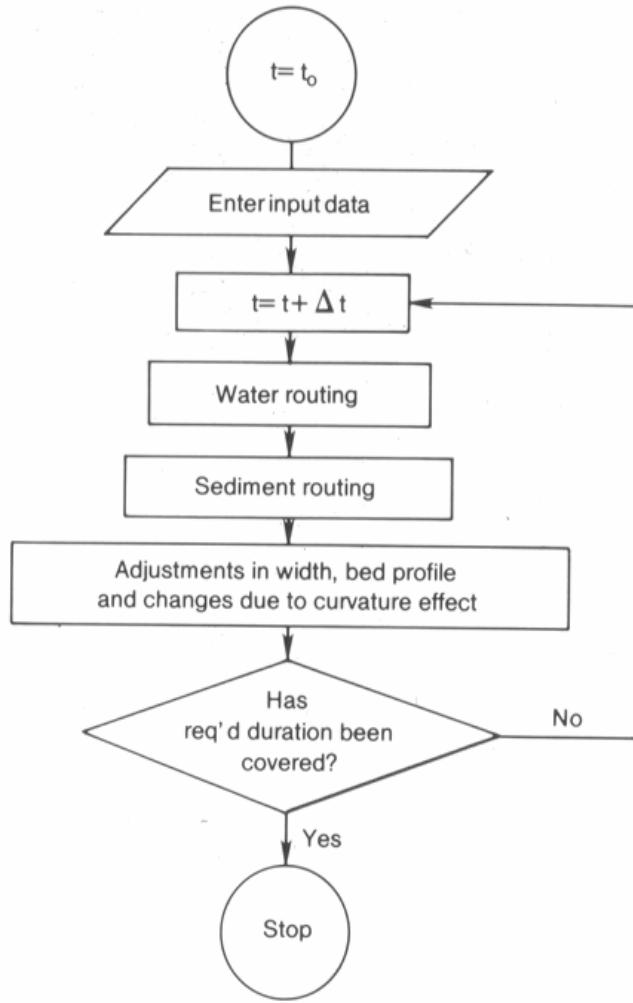


Fig. 2 Flow chart showing major steps of computation for FLUVIAL model

In a curved channel, the total energy gradient,  $S$ , in Eq. 2 is partitioned into the longitudinal energy gradient,  $S'$ , and the transverse energy gradient,  $S''$ , due to secondary currents, i.e.

$$S = S' + S'' \quad (3)$$

The longitudinal energy gradient can be evaluated using any valid flow resistance relationship. If Manning's formula is employed, the roughness coefficient  $n$  must be selected by the modeler. However, if a formula for alluvial bed roughness (e.g., Brownlie's formula, 1983) is used, the roughness coefficient is predicted by the formula.

Method for evaluating the transverse energy gradient by Chang (1983) is used in the model. Because of the streamwise changing curvature, the transverse energy loss varies with the growth and decay of secondary currents. Analytical relationships pertaining to curved channels are often based upon the mean channel radius,  $r_c$ . Under the streamwise changing curvature, the application of such relationships is limited to fully-developed transverse flow for which the curvature is defined. Streamwise variation of transverse flow, over much of the channel length, is characterized by its growth and decay. In order to describe this spatial variation, the mean flow curvature defined as the flow curvature along the discharge centerline is employed. It is assumed that analytical relationships for developed transverse flows are applicable for developing transverse flows when the mean channel curvature,  $r_c$ , is replaced by the mean flow curvature,  $r_f$ . Upon entering a bend, the mean flow curvature increases with the growth in transverse circulation. In a bend, the transverse flow becomes fully developed if the flow curvature approaches the channel curvature. In the case of exiting from a bend to the downstream tangent in which the channel curvature is zero, the flow curvature decreases with the decay of transverse circulation.

The reason that the flow curvature lags behind the channel curvature during circulation growth and decay is attributed to the internal turbulent shear that the flow has to overcome in transforming from parallel flow into the spiral pattern and vice versa. From the dynamic equation for the transverse velocity, an equation governing the streamwise variation in transverse surface velocity,  $v$ , was derived (Chang, 1984). In finite difference form, the change in  $v$  over the distance  $\Delta s$  is given by

$$\bar{v}_{i+1} = \left\{ \bar{v}_i + F_1(f) \frac{U}{r_c} \exp[F_2(f) \Delta s] \Delta s \right\} \exp[-F_2(f) \Delta s] \quad (4)$$

where  $v$  is the transverse surface velocity along discharge centerline,  $U$  is the average velocity of a cross section,  $i$  and  $i+1$  are  $s$ -coordinate indices,  $F_1$  and  $F_2$  are functions of  $f$  (friction factor) and depth, and the overbar denotes averaging over the incremental distance between  $i$  and  $i+1$ . Eq. 4 provides the spatial variation in  $v$ , from which the mean flow curvature may be obtained using the transverse velocity profile. From the transverse velocity profile by Kikkawa, et al. (1976), the mean flow curvature,  $r_f$ , is related to the transverse surface velocity as

$$r_f = \frac{D_c}{\kappa} \frac{U}{v} \left\{ \frac{10}{3} - \frac{1}{\kappa} \frac{5}{9} \left( \frac{f}{2} \right)^{1/2} \right\} \quad (5)$$

where  $D_c$  is the flow depth at discharge centerline (thalweg) and  $\kappa$  is the Karman constant. At each time step, the mean flow curvature at each cross section is obtained using Eqs. 4 and 5. Accuracy of computation for the finite-difference equation (Eq. 4) is maintained if the step size  $\Delta s \leq 2D_c$ . For this reason, the distance between two adjacent cross sections is divided into smaller increments if necessary. Flow parameters for these increments are interpolated from values known at adjacent cross sections.

If the temporal terms in Eqs. 1 and 2 are ignored, water routing may be simplified by computing water-surface profiles at successive time steps. This option is available in the model. Computation of the water-surface profile at each time step is based upon the standard-step method (see Chow, 1957) using techniques similar to the HEC-2 computer model (U. S. Army Corps of

Engineers, 1982). For many cases, spatial variation in discharge due to channel storage is small and this technique produces closely similar results as the unsteady routing.

## VI. SEDIMENT ROUTING

The sediment routing component for the FLUVIAL model has the following major features: (1) Computation of sediment transport capacity using a suitable formula for the physical conditions, (2) determination of actual sediment discharge by making corrections for sorting and diffusion, (3) upstream conditions for sediment inflow, and (4) numerical solution of the continuity equation for sediment. These features are evaluated at each time step, the results so obtained are used in determining the changes in channel configuration.

### Determination of Sediment Discharge

To treat the time-dependent and non-equilibrium sediment transport, the bed material at each section is divided into several, say five, size fractions; the size for each fraction is represented by its geometric mean. For each size fraction, sediment transport capacity is first computed using a sediment-transport formula. The FLUVIAL model currently provides the choices of the following six sediment formulas: (1) Engelund-Hansen formula (1967), (2) Yang's unit stream power formula (1972, 1986), (3) Graf's formula (1970), (4) Ackers-White formula, (5) Parker, et al. formula for gravel (1982), and (6) Meyer-Peter and Muller bedload formula. The actual sediment rate is obtained by considering sediment material of all size fractions already in the flow as well as the exchange of sediment load with the bed using the method by Borah et al. (1982). If the stream carries a load in excess of its capacity, it will deposit the excess material on the bed. In the case of erosion, any size fraction available for entrainment at the bed surface will be removed by the flow and added to the sediment already in transport. During sediment removal, the exchange between the flow and the bed is assumed to take place in the active layer at the surface. Thickness of the active layer is based upon the relation defined by Borah, et al. This thickness is a function of the material size and composition, but also reflects the flow condition. During degradation, several of these layers may be scoured away, resulting in the coarsening of the bed material and formation of an armor coat. However, new active layers may be deposited on the bed in the process of aggradation. Materials eroded from the channel banks, excluding that portion in the wash load size range, are included in the accounting. Bed armoring develops if bed shear stress is too low to transport any available size.

The non-equilibrium sediment transport is also affected by diffusion, particularly for finer sediments. Because of diffusion, the deposition or entrainment of sediment is a gradual process and it takes certain travel time or distance to reach the transport capacity for a flow condition. Therefore, the actual sediment discharge at a section depends not only on the transport capacity at the section but also on the supply from upstream and its gradual adjustment toward the flow condition of this section. In the model, the sediment discharge is corrected for the diffusion effects on deposition and entrainment using the method by Zhang, et al. (1983). The procedures for computing sediment transport rate, sediment sorting and diffusion are applied to the longitudinal and transverse directions. They are also coupled with bed-profile evolution, which is described later in this section.

Sediment discharge may be limited by availability, as exemplified by the flow over a grade-

control structure or bed rock. The very high transport capacity at such a section, associated with the high velocity, is limited by the supply rate from upstream; that is, the sediment discharge at such a section is under upstream control.

### Upstream Boundary Conditions for Sediment Inflow

The rate of sediment inflow into the study reach is provided by the upstream boundary condition for sediment. If this rate is known, it may be included as a part of the input and used in the simulation. Unfortunately, sediment rating data are rarely very reliable or simply not available. For such cases, it is assumed that the river channel remains unchanged above the study reach, and sediment inflow rate is computed at the upstream section at each time step, the same way they are computed at other cross sections. For this reason, the study reach should extend far enough upstream so that the channel beyond may be considered basically stable. Factors that may induce river channel changes must be included in the study reach.

### Numerical Solution of Continuity Equation for Sediment

Changes in cross-sectional area, due to longitudinal and transverse imbalances in sediment discharge, are obtained based upon numerical solution of continuity equations for sediment in the respective directions. First, the continuity equation for sediment in the longitudinal direction is

$$(1 - \lambda) \frac{\partial A_b}{\partial t} + \frac{\partial Q_s}{\partial s} - q_s = 0 \quad (6)$$

where  $\lambda$  is the porosity of bed material,  $A_b$  is the cross-sectional area of channel within some arbitrary frame,  $Q_s$  is the bed-material discharge, and  $q_s$  is the lateral inflow rate of sediment per unit length. According to this equation, the time change of cross-sectional area  $\partial A_b / \partial t$  is related to the longitudinal gradient in sediment discharge  $\partial Q_s / \partial s$  and lateral sediment inflow  $q_s$ . In the absence of  $q_s$ , longitudinal imbalance in  $Q_s$  is absorbed by channel adjustments toward establishing uniformity in  $Q_s$ .

The change in cross-sectional area  $\Delta A_b$  for each section at each time step is obtained through numerical solution of Eq. 6. This area change will be applied to the bed and banks following correction techniques for channel width and channel-bed profile.

From Eq. 6, the correction in cross-sectional area of channel bed for a time increment can be written as

$$\Delta A_b = - \frac{\Delta t}{1 - \lambda} \left( \frac{\partial Q_s}{\partial s} - q_s \right) \quad (7)$$

At a section  $i$ , the lateral sediment inflow may be written as

$$q_s = - \frac{1}{2} (q_s^j + q_s^{j+1}) \quad (8)$$

where superscripts  $j$  and  $j+1$  are the times at  $t$  and  $t+\Delta t$ , respectively. This model employs an upstream difference in  $s$  and a centered difference in  $t$  for the partial derivative,  $\partial Q_s / \partial s$ , in Eq. 6, i.e.

$$\left(\frac{\partial Q_s}{\partial s}\right)_i = \frac{2}{\Delta s_i + \Delta s_{i-1}} \left( \frac{Q_{s_i}^j + Q_{s_i}^{j+1}}{2} - \frac{Q_{s_{i-1}}^j + Q_{s_{i-1}}^{j+1}}{2} \right) \quad (9)$$

where  $\Delta s_i$  is the distance between sections  $i$  and  $i+1$ ,  $\Delta s_{i-1}$  is the distance between  $i-1$  and  $i$ . With this upstream difference for  $\partial Q_s / \partial s$ , the change in bed area at a section  $i$  depends on sediment rates at this section and its upstream section  $i-1$ ; it is independent of the sediment rate at the downstream section. In other words, it is under upstream control. Contrary to this, the stage at a section in subcritical flow depends on the downstream stage and is independent of the upstream stage; i.e., the stage is under downstream control in a subcritical flow.

## VII. SIMULATION OF CHANGES IN CHANNEL WIDTH

The change in cross-sectional area  $\Delta A_b$  obtained in sediment routing represents the correction for a time increment  $\Delta t$  that needs to be applied to the bed and banks. With  $\Delta A_b$  being the total correction, it is possible for both the bed and banks to have deposition or erosion; it is also possible to have deposition along the banks but erosion in the bed and vice versa. The direction of width adjustment is determined following the stream power approach and the rate of change is based upon bank erodibility and sediment transport described in the following.

### Direction of Width Adjustment

For a time step, width corrections at all cross sections are such that the streamwise distribution of stream power for the reach moves toward uniformity; these corrections are subject to the physical constraint of rigid banks and limited by the amount of sediment removal or deposition along the banks within the time step. A river channel undergoing changes usually has nonuniform spatial distribution in power expenditure or  $\gamma QS$ . Usually the spatial variation in  $Q$  is small, but that in  $S$  is pronounced. An adjustment in width reflects the river's adjustment in flow resistance, that is, in power expenditure. A reduction in width at a cross section is usually associated with a decrease in energy gradient for the section, whereas an increase in width is accompanied by an increase in energy gradient. To determine the direction of width change at a section  $I$ , the energy gradient at this section,  $S_i$ , is compared with the weighted average of its adjacent sections,  $S_i$ . Here

$$S_i = \frac{S_{i+1} \Delta s_{i-1} + S_{i-1} \Delta s_i}{\Delta s_i + \Delta s_{i-1}} \quad (10)$$

If the energy gradient  $S_i$  is greater than  $S_i$ , channel width at this section is reduced so as to decrease the energy gradient. On the other hand, if  $S_i$  is lower, channel width is increased in order to raise the energy gradient. These changes are subject to the rate of width adjustment and physical constraints.

Width changes in alluvial rivers are characterized by widening during channel-bed aggradation (or fill) and reduction in width at the time of degradation (or scour). Such river channel changes represent the river's adjustments in resistance to seek equal power expenditure along its course. A degrading reach usually has a higher channel-bed elevation and energy gradient than do its adjacent sections. Formation of a narrower and deeper channel at the degrading reach decreases its energy gradient due to reduced boundary resistance. On the other hand, an aggrading reach is usually lower in channel-bed elevation and energy gradient. Widening at the aggrading reach increases its energy gradient due to increasing boundary resistance. These adjustments in channel width reduce the spatial variation in energy gradient and total power expenditure of the channel.

### **Rate of Width Adjustment**

For a time increment, the amount of width change depends on the sediment rate, bank configuration and bank erodibility. The slope of an erodible bank is limited by the angle of repose of the material. The rate of width change depends on the rate at which sediment material is removed or deposited along the banks. For the same sediment rate, width adjustment at a tall bank is not as rapid as that at a low bank. The rates of width adjustment for cases of width increase and decrease are somewhat different as described below separately.

An increase in width at a channel section depends on sediment removal along the banks. The maximum rate of widening occurs when sediment inflow from the upstream section does not reach the banks of this section while bank material at this section is being removed. River banks have different degrees of resistance to erosion; therefore, the rate of sediment removal along a bank needs to be modified by a coefficient. For this purpose, the bank erodibility factor is introduced as an index for the erosion of bank material and the four bank types reflecting the variation in erodibility are classified as follows

- (1) Non-erodible banks.
- (2) Erosion-resistant banks, characterized by highly cohesive material or substantial vegetation, or both.
- (3) Moderately erodible banks having medium bank cohesion.
- (4) Easily erodible banks with noncohesive material.

Values of the bank erodibility factor vary from 0 for the first type to 1 for the last type of banks. The values of 0.2 and 0.5 have been empirically determined for the second and third types, respectively, based upon test and calibration of the model using field data from rivers in the western U. S. However, the bank erodibility factor should still be calibrated whenever data on width changes are available.

A decrease in channel width is accomplished by sediment deposition along the banks or by a decrease in stage, or both. For practical reasons, deposition does not exceed the stage in the model. The maximum amount of width reduction at a section occurs when sediment inflow from the upstream section is spread out at this section and the sediment removal from the bank areas at this section is zero. Within the limit of width adjustment, changes in width are made at all cross sections in the study reach toward establishing uniformity in power expenditure.

## **VIII. SIMULATION OF CHANGES IN CHANNEL-BED PROFILE**

After the banks are adjusted, the remaining correction for  $\Delta A_b$  is applied to the bed.

Distributions of erosion and deposition, or scour and fill, at a cross section are usually not uniform. Generally speaking, deposition tends to start from the low point and is more uniformly distributed because it tends to build up the channel bed in nearly horizontal layers. This process of deposition is often accompanied by channel widening. On the other hand, channel-bed erosion tends to be more confined with greater erosion in the thalweg. This process is usually associated with a reduction in width as the banks slip back into the channel. Such characteristic channel adjustments are effective in reducing the streamwise variation in stream power as the river seeks to establish a new equilibrium. In the model, the allocation of scour and fill across a section during each time step is assumed to be a power function of the effective tractive force  $\tau_o - \tau_c$ , i.e.

$$\Delta z = \frac{(\tau_o - \tau_c)^m}{\sum_B (\tau_o - \tau_c)^m \Delta y} \Delta A_b \quad (11)$$

where  $\Delta z$  is the local correction in channel-bed elevation,  $\tau_o$  (given by  $\gamma DS$ ) is the local tractive force,  $\tau_c$  is the critical tractive force,  $m$  is an exponent, and  $y$  is the horizontal coordinate, and  $B$  is the channel width. The value of  $\tau_c$  is zero in the case of fill.

The  $m$  value in Eq. 11 is generally between 0 and 1; it affects the pattern of scour-fill allocation. For the schematic cross section shown in Fig. 3, a small value of  $m$ , say 0.1, would mean a fairly uniform distribution of  $\Delta z$  across the section; a larger value, say 1, will give a less uniform distribution of  $\Delta z$  and the local change will vary with the local tractive force or roughly the depth. The value of  $m$  is determined at each time step such that the correction in channel-bed profile will result in the most rapid movement toward uniformity in power expenditure, or linear water-surface profile, along the channel.

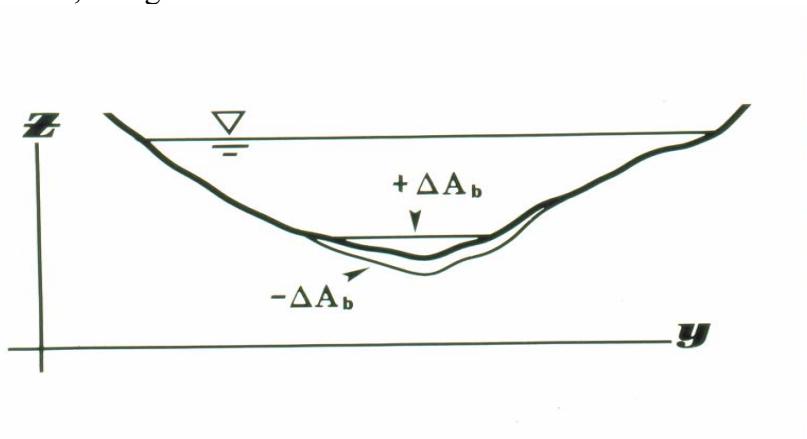


Fig. 3. Corrections of bed profile for aggradation and degradation. They are made in such ways that water-surface profile or power expenditure moves toward uniformity.

Equation 11 may only be used in the absence of channel curvature. The change in bed area at a cross section in a curved reach is

$$\Delta A_b = \frac{1}{r_f} \int r dz dr \quad (12)$$

where  $r_f$  is the radius of curvature at the discharge centerline or thalweg. Because of the curvature, adjacent cross sections are not parallel and the spacing  $\Delta s$  between them varies across the width. Therefore, the distribution of  $\Delta z$  given in Eq. 11 needs to be weighted according to the  $r$ -coordinate with respect to the thalweg radius,  $r_f/r$ , i.e.

$$\Delta z = \frac{(\tau_o - \tau_c)^m/r}{\sum_B (\tau_o - \tau_c)^m/r \Delta r} \Delta A_b \quad (13)$$

## IX. SIMULATION OF CHANGES DUE TO CURVATURE EFFECT

Simulation of curvature-induced scour and deposition is based upon the flow curvature for which the streamwise variation is given by Eq. 4. The major features of transverse sediment transport and changes in bed topography are described below.

Sediment transport, in the presence of transverse flow, has a component in that direction. Sediment movement in the transverse direction contributes to the adjustment of transverse bed profile. In an unsteady flow, the transverse bed profile varies with time, and it is constantly adjusted toward equilibrium through scour and deposition. The transverse bed load per unit channel length  $q_b'$  can be related to the streamwise transport  $q_b$ . Such a relationship by Ikeda (1982) can be written in parametric form as

$$\frac{q_b'}{q_b} = F \left( \tan \delta, \frac{\partial z}{\partial r} \right) \quad (14)$$

where  $\delta$  is the angle of deviation of bottom currents from the streamwise direction. The near-bed transverse velocity is a function of the curvature, and it is computed using the flow curvature.

Equation 14 relates the direction of bed-load movement to the direction of near-bed velocity and transverse bed slope  $\partial z/\partial r$ . As transverse velocity starts to move sediment away from the concave bank, it creates a transverse bed slope that counters the transverse sediment movement. An equilibrium is reached, i.e.,  $q_b' = 0$ , when the effects of these opposing tendencies are in balance. Transverse bed-profile evolution is related to the variation in bed-material load. Ikeda and Nishimura (1986) developed a method for estimating transport and diffusion of fine sediments in the transverse direction by vertical integration of suspended load over the depth. Their model for predicting the transverse bed slope is also employed.

Changes in channel-bed elevation at a point due to transverse sediment movement are computed using the transverse continuity equation for sediment

$$\frac{\partial z}{\partial t} + \frac{1}{1-\lambda} \frac{1}{r} \frac{\partial}{\partial r} (r q_s') = 0 \quad (15)$$

Written in finite difference form with a forward difference for  $q_s'$ , this equation becomes

$$\Delta z_k = \frac{\Delta t}{1 - \lambda} \frac{2}{r_k} \frac{r_{k+1} q'_{s k+1} - r_k q'_{s k}}{r_{k+1} - r_{k-1}} \quad (16)$$

where  $k$  is the radial (transverse) coordinate index measured from the center of radius. Equation 16 provides the changes in channel-bed elevation for a time step due to transverse sediment movement. These transverse changes, as well as the longitudinal changes, are applied to the stream bed at each time step. Bed-profile evolution is simulated by repeated iteration along successive time steps.

## X. TEST AND CALIBRATION OF FLUVIAL-12

The accuracy of a mathematical model depends on the physical foundation, numerical techniques, and physical relations for momentum, flow resistance and sediment transport. Test and calibration are important steps to be taken for more effective use of a model. Because of the difference in sensitivity of simulated results to each relation or empirical coefficient, more attention needs to be paid to those that generate sensitive results. Major items that require calibration include the roughness coefficient, sediment transport equation, bank erodibility factor, bed erodibility factor, and so on.

To determine the sensitivity of flow, the sediment transport, and the channel changes caused by the variation of each variable, different values of the variable need to be used in simulation runs and the results so obtained are compared. Generally speaking, the rate of channel changes is more sensitive to the sediment rate computed from a sediment equation but the equilibrium channel configuration is less sensitive. For example, the constriction scour at a bridge crossing, or the equilibrium local scour at a bridge pier, is found to be more or less independent of the sediment equation, or sediment size, since both inflow and outflow rates of sediment are affected by about the same proportion. It may also be stated that the rate of widening is sensitive to the bank erodibility factor but that the equilibrium width is not nearly as sensitive.

Field data are generally used for test and calibration of a model. The required information includes channel configuration before and after the changes, a flow record, and sediment characteristics. Data sets with more complete information are also more useful. The FLUVIAL-12 has undergone test and calibration using many data sets. Such studies together with their respective references are given below. Many such data sets are also useful for the test and calibration of other models.

- (1) Test and Calibration Study Using Data from the San Diego River in Southern California. Chang, H. H., 1982, "Mathematical Model for Erodible Channels", *Journal of the Hydraulics Division*, ASCE, 108(HY5), 678-689. Closure in 109(HY4), 655-656.
- (2) Test and Calibration Study Using Data from the Inlet Channel of San Elijo Lagoon in Southern California. Chang, H. H., and Hill, J. C., 1977, "Minimum Stream Power for Rivers and Deltas," *Journal of the Hydraulics Division*, ASCE, 103(HY12), 1375-89.
- (3) Test and Calibration Study Using Data from the San Dieguito River in Southern California.

Chang, H. H., 1984, "Modeling of River Channel Changes", *Journal of Hydraulic Engineering*, ASCE, 110(2), 157-172. Closure in 113(2), 1987, 265-267.

(4) Test and Calibration Study Using Data from the San Lorenzo River in Northern California. Chang, H. H., 1985, "Water and Sediment Routing through Curved Channels", *Journal of Hydraulic Engineering*, ASCE, 111(4), 644-658.

(5) Test and Calibration Study Using Data from San Juan Creek in Southern California. Chang, H. H., 1987, "Modeling Fluvial Processes in Streams with Gravel Mining," in *Sediment Transport in Gravel-Bed Rivers*, Thorne, et al. editors, John Wiley & Sons, pp. 977-988. Also presented at the International Workshop on Problems of Sediment Transport in Gravel-Bed River, Colorado State University, August 12-17, 1985.

(6) Test and Calibration Using the Missouri River Data in Iowa. Chang, H. H., 1988, "Test and Calibration Study of the FLUVIAL Model Using the Missouri River Data", Prepared for the Waterways Experiment Station, U.S. Army Corps of Engineers, Under Contract "Computer-Based Design of River Bank Protection", No. DACW39-87-0039.

(7) Test and Calibration Study Using Data from the Santa Clara River in Southern California. Chang, H. H. and Stow, D., 1989, "Mathematical Modeling of Fluvial Sediment Delivery", *Journal of Waterway, Port, Coastal, and Ocean Engineering*, ASCE, 115(3), 311-326.

(8) Test and Calibration Study Using Data from the Fall River in Colorado. Chang, H. H., 1991, "Simulation of Bed Topography in a Meandering River", *Proceedings of the Fifth Interagency Sedimentation Conference*, Las Vegas, NV, March 21-28.

(9) Test and Calibration Study Using Data from the San Luis Rey River in Southern California. Chang, H. H., 1991, "Computer Simulation of River Channel Changes Induced by Sand Mining", *Proceedings of International Conference on Computer Applications in Water Resources*, July 3-6, Taipei, Taiwan, Vol. 1, 226-234.

(10) Test and Calibration Study Using Data from Stony Creek in Northern California. Chang, H. H., Harris, C., Lindsay, W., Nakao, S. S., and Kia, R., 1993, "Selecting Sediment Transport Equation for Scour Simulation at Bridge Crossing", *Proceedings of the 1993 National Conference on Hydraulic Engineering*, San Francisco, CA, July 25-30, pp. 1744-1949. Chang, H. H., 1994, "Selection of Gravel-Transport Formula for Stream Modeling", *Journal of Hydraulic Engineering*, ASCE, Vol. 120, No. 5, May, pp. 646-651.

(11) Test and Calibration Study Using Data from the Feather River in Northern California. Chang, H. H., 1993, "Numerical Modeling for Sediment-Pass-Through Operations of Reservoirs on North Fork Feather River", prepared for Pacific Gas & Electric Company, San Francisco. Chang, H. H., Harrison, L., Lee, W., and Tu, S., 1996, "Numerical Modeling for Sediment-Pass-Through Reservoirs", *Journal of Hydraulic Engineering*, ASCE, Vol. 122, No. 7, pp. 381-388.

(12) Test and Calibration Study Using Data from the San Dieguito River in Southern California for the 1993 Floods. Chang, H. H., Grove, R., and Pearson, D., 2001, "Modeling Changes in an Ephemeral Coastal River", *Journal of Floodplain Management*, Floodplain Management

Association, Vol. 2, No. 2, April, pp. 17-28.

(13) Test and Calibration Study Using Data from a Tidal Inlet with Oscillating Tidal Flow. Chang, H. H., 1997, "Modeling Fluvial Processes in Tidal Inlet", *Journal of Hydraulic Engineering*, ASCE, Vol. 123, No. 12, pp. 1161-1165.

(14) Correlation Study of FLUVIAL-12 Model Using Flume Data from National Taiwan University, Master's Thesis by Thomas Macchiarella, San Diego State University, May 2001.

(15) Chang, H.H., "A Case Study of Fluvial Modeling of River Responses to Dam Removal", *Journal of Hydraulic Engineering*, ASCE, 2006.

## APPENDIX A. REFERENCES

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## **APPENDIX B. USERS INSTRUCTIONS FOR THE FLUVIAL MODEL**

### **I. INPUT DESCRIPTION**

The basic data requirements for a modeling study include (1) topographic maps of the river reach from the downstream end to the upstream end of study, (2) digitized data for cross sections in the HEC-2 format with cross-sectional locations shown on the accompanying topographic maps, (3) flow records or flood hydrographs and their variations along the study stream reach, if any, and (4) size distributions of sediment samples along the study reach. Additional data are required for special features of a study river reach.

The HEC-2 format for input data is used in all versions of the FLUVIAL model. Data records for HEC-2 pertaining to cross-sectional geometry (X1 and GR), job title (T1, T2, and T3), and end of job (EJ), are used in the FLUVIAL model. If a HEC-2 data file is available, it is not necessary to delete the unused records except that the information they contain are not used in the computation. For the purpose of water- and sediment-routing, additional data pertaining to sediment characteristics, flood hydrograph, etc., are required and supplied by other data records. Sequential arrangement of data records are given in the following.

<b>Records</b>	<b>Description of Record Type</b>
T1,T2,T3	Title Records
G1	General Use Record
G2	General Use Records for Hydrographs
G3	General Use Record
G4	General Use Record for Selected Cross-Sectional Output
G5	General Use Record
G6	General Use Record for Selecting Times for Summary Output
G7	General Use Record for Specifying Erosion Resistant Bed Layer
GS	General Use Records for Initial Sediment Compositions
GB	General Use Records for Time Variation of Base-Level
GQ	General Use Records for Stage-Discharge Relation of Downstream Section
GI	General Use Records for Time Variation of Sediment Inflow
X1	Cross-Sectional Record
Record for Specifying Special Features of a Cross Section	
GR	Record for Ground Profile of a Cross Section
SB	Record for Special Bridge Routine
BT	Record for Bridge Deck Definition
EJ	End of Job Record

Variable locations for each input record are shown by the field number. Each record has an input format of (A2, F6.0, 9F8.0). Field 0 occupying columns 1 and 2 is reserved for the required record identification characters. Field 1 occupies columns 3 to 8; Fields 2 to 10 occupy 8 columns each. The data records are tabulated and described in the following.

**T1, T2, T3 Records** - These three records are title records that are required for each job.

<b>Field</b>	<b>Variable</b>	<b>Value</b>	<b>Description</b>
0	IA	T1	Record identification characters
1-10	None		Numbers and alphanumeric characters for title

**G1 Record** - This record is required for each job, used to enter the general parameters listed below. This record is placed right after the T1, T2, and T3 records.

<b>Field</b>	<b>Variable</b>	<b>Value</b>	<b>Description</b>
0	IA	G1	Record identification characters
1	TYME	+	Starting time of computation on the hydrograph, in hours
2	ETIME	+	Ending time of computation on the hydrograph, in hours
3	DTMAX	+	Maximum time increment $\Delta t$ allowed, in seconds
4	ISED	1 2 3 4 5 6	Select Graf's sediment transport equation. Select Yang's unit stream power equation. The sediment size is between 0.063 and 10 mm. Select Engelund-Hansen sediment equation. Select Parker gravel equation. Select Ackers-White sediment equation. Select Meyer-Peter Muller equation for bed load.
5	BEF	+	Bank erodibility factor for the study reach. This value is used for each section unless otherwise specified in Field 9 of the XF record. Use 1 for highly erodible banks; 0.5 for moderately erodible banks; and 0.2 for erosion-resistant banks. Any value between 0 and 1 may be used.
6	IUC	0 1	English units are used in input and output. Metric units are used in input and output.
7	CNN	+	Manning's $n$ value for the study reach. This value is used for a section unless otherwise specified in Field 4 of the XF record. If bed roughness is computed based upon alluvial bedforms as specified in Field 5 of the G3 record, only an approximate $n$ value needs to be entered here.
8	PTM1	+	First time point in hours on the hydrograph at which summary output and complete cross-sectional output are requested. It is usually

the peak time, but it may be left blank if no output is requested.

9	PTM2	+	Second time point on the hydrograph in hours at which summary output and complete cross-sectional output are requested. It is usually the time just before the end of the simulation. This field may be left blank if no output is needed.
10	KPF	+	Frequency of printing summary output, in number of time steps. The default value is 1.

**G2 Records** - These records are required for each job, used to define the flow hydrograph(s) in the channel reach. The first one (or two) G2 records are used to define the spatial variation in water discharge along the reach; the succeeding ones are employed to define the time variation(s) of the discharge. Up to 10 hydrographs, with a maximum of 120 points for each, are currently dimensioned. See section II for tributaries. These records are placed after the G1 record.

Field	Variable	Value	Description
First G2			
0	IA	G2	Record identification characters
1	IHP1	+	Number of last cross section using the first (downstream most) hydrograph. The number of section is counted from downstream to upstream with the downstream section number being one. See also section II.
2	NP1	+	Number of points connected by straight segments used to define the first hydrograph.
3	IHP2	+	Number of last section using the second hydrograph if any. Otherwise leave it blank.
4	NP2	+	Number of points used to define the second hydrograph if any. Otherwise leave it blank.
5	IHP3	+	Number of last section using the third hydrograph if any. Otherwise leave it blank.
6	NP3	+	Number of points used to define the third hydrograph if any. Otherwise leave it blank.
7	IHP4	+	Number of last section using the fourth hydrograph if any. Otherwise leave it blank.
8	NP4	+	Number of points used to define the fourth hydrograph if any. Otherwise leave it blank.

9	IHP5	+	Number of last section using the fifth hydrograph if any. Otherwise leave it blank.
10	NP5	+	Number of points used to define the fifth hydrograph if any. Otherwise leave it blank.

Second G2: Note that this record is used only if more than 5 hydrographs are used for the job. It is necessary to place a negative sign in front of NP5 located in the 10th field of the first G2 record as a means to specify that more than 5 hydrographs are used.

0	IA	G2	Record identification characters
1	IHP6	+	Number of last cross section using the sixth hydrograph if any. Otherwise leave it blank.
2	NP6	+	Number of points connected by straight segments used to define the sixth hydrograph if any. Otherwise leave it blank.
3	IHP7	+	Number of last section using the seventh hydrograph if any. Otherwise leave it blank.
4	NP7	+	Number of points used to define the seventh hydrograph
5	IHP8	+	Number of last section using the eighth hydrograph if any. Otherwise leave it blank.
6	NP8	+	Number of points used to define the eighth hydrograph
7	IHP9	+	Number of last section using the ninth hydrograph if any. Otherwise leave it blank.
8	NP9	+	Number of points used to define the ninth hydrograph
9	IHP10	+	Number of last section using the tenth hydrograph if any. Otherwise leave it blank.
10	NP10	+	Number of points used to define the tenth hydrograph

#### Succeeding G2 Record(s)

1	Q11, Q21 Q31	+	Discharge coordinate of point 1 for each hydrograph, in ft <sup>3</sup> /sec or m <sup>3</sup> /sec
2	TM11, TM21 TM31	+	Time coordinate of point 1 for each hydrograph, in hours
3	Q12, Q22 Q32	+	Discharge coordinate of point 2 for each hydrograph, in cfs or cms

4 TM12,TM22 + Time coordinate of point 2 for each hydrograph, in hours  
                   TM32

Continue with additional discharge and time coordinates. Note that time coordinates must be in increasing order.

**G3 Record** - This record is used to define required and optional river channel features for a job as listed below. This record is placed after the G2 records.

Field	Variable	Value	Description
0	IA	G3	Record identification characters
1	S11	+	Slope of the downstream section, required for a job
2	BSP	0	One-on-one slope for rigid bank or bank protection
		+	Slope of bank protection in BSP horizontal units on 1 vertical unit. In the case of vertical bank, use 0.05 for BSP. This value is used for all cross sections unless otherwise specified in Field 8 of the XF record
			for a section.
3	DSOP	0	Downstream slope is allowed to vary during simulation.
		1	Downstream slope is fixed at S11 given in Field 1.
4	TEMP	0	Water temperature is 15°C.
		+	Water temperature in degrees Celsius
5	ICNN	0	Manning's n defined in Field 7 of the G1 record or those in Field 4 of the XF records are used.
		1	Brownlie's formula for alluvial bed roughness is used to calculate Manning's n in the simulation.
6	TDZAMA	0	Thickness of erodible bed layer is 100 ft (30.5 m).
		+	Thickness of erodible bed layer in ft or m. This value is applied to the entire channel reach but it may be redefined for a section using Field 10 of the XF record.
7	SPGV	0	Specific gravity of sediment is 2.65.
		+	A value between 1 and 10 is for the specific gravity of sediment
	QMIN	+	A value greater than 10 is the minimum discharge in cfs included in modeling. Discharges lower than QMIN carrying no bed sediment are ignored in modeling.
8	KGS	0	The number of size fractions for bed material is 5.
		+	The number of size fractions for bed material. Its maximum value is

			8.
9	PHI	0	The angle of repose for bed material is 36°.
		+	Angle of repose for bed material

**G4 Record** - This is an optional record used to select cross sections (up to 4) to be included at each summary output. Each cross section is identified by its number which is counted from the downstream section. This record also contains other options; it is placed after the G3 record.

<b>Field</b>	<b>Variable</b>	<b>Value</b>	<b>Description</b>
0	IA	G4	Record identification characters
1	IPLT1	+	Number of cross section
2	IPLT2	+	Number of cross section
3	IPLT3	+	Number of cross section
4	IPLT4	+	Number of cross section
5	IEXCAV	+	A positive integer indicates number of cross section where sand/gravel excavation occurs.
6	GIFAC	+	A non-zero constant is used to modify sediment inflow at the upstream section.
7	PZMIN	0	Minimum bed profile during simulation run is not requested.
		1	Output file entitled TZMIN for minimum bed profile is requested.
10	REXCAV	+	A non-zero value specifies rate of sand/gravel excavation at Section IEXCAV.

**G5 Record** - This is an optional record used to specify miscellaneous options, including unsteady-flow routing for the job based upon the dynamic wave, bend flow characteristics. If the unsteady flow option is not used, the water-surface profile for each time step is computed using the standard-step method. When the unsteady flow option is used, the downstream water-surface elevation must be specified using the GB records.

<b>Field</b>	<b>Variable</b>	<b>Value</b>	<b>Description</b>
0	IA	G5	Record identification characters
1	DT	0	The first time step is 100 seconds.
		+	Size of the first time step in seconds.

2	IROUT	0	Unsteady water routing is not used; water-surface profiles are computed using standard-step method.
		1	Unsteady water-routing based upon the dynamic wave is used to compute stages and water discharges at all cross sections for each time step.
3	PQSS	0	No output of gradation of sediment load
		3	Gradation of sediment load is included in output in 1,000 ppm by weight.
5	TSED	0	Rate of tributary sediment inflow is 1 times the discharge ratio.
		+	Rate of tributary sediment inflow is TSED times the discharge ratio.
6	PTV	0	No output of transverse distribution of depth-averaged velocity
		1	Transverse distribution of depth-averaged velocity is printed. The velocity distribution is for bends with fully developed transverse flow.
10	DYMAX	0	No GR points are inserted for cross sections.
		+	Maximum value of spacing between adjacent points at a cross section (ft or m). If this value is exceeded, intermediate points will be inserted by interpolation. The number of points inserted is given in Field 10 of the X3 record in output.

**G6 Record** - This is an optional record used to select time points for summary output. Up to 30 time points may be specified. The printing frequency (KPF) in Field 10 of the G1 Record may be suppressed by using a large number such as 9999.

Field	Variable	Value	Description
First G6 Record			
0	IA	G6	Record identification characters
1	NKPS	+	Number of time points
Succeeding G6 Record(s)			
0	IA	G6	Record identification characters
1	SPTM(1)	+	First time point, in hours
2	SPTM(2)	+	Second time point, in hours

Continue with additional time points.

**G7 Record** - This is an optional record used to specify erosion resistant bed layer, such as a caliche layer, that has a lower rate of erosion.

<b>Field</b>	<b>Variable</b>	<b>Value</b>	<b>Description</b>
First G7 Record			
0	IA	G7	Record identification characters
1	KG7	+	Number of time points used to define the known erosion rate in relation to flow velocity
2	THICK	+	Thickness of erosion resistant layer, in feet
Succeeding G7 Record(s)			
0	IA	G7	Record identification characters
1	ERATE(1)	+	Erosion rate, in feet per hour
2	G7V(2)	+	Velocity, in feet per second

Continue with additional time points.

**GS Record** - At least two GS records are required for each job, used to specify initial bed-material compositions in the channel at the downstream and upstream cross sections. The first GS record is for the downstream section; it should be placed before the first X1 record and after the G4 record, if any. The second GS record is for the upstream section; it should be placed after all cross-sectional data and just before the EJ record. Additional GS records may be inserted between two cross sections within the stream reach, with the total number of GS records not to exceed 15. Each GS record specifies the sediment composition at the cross section located before the record. From upstream to downstream, exponential decay in sediment size is assumed for the initial distribution. Sediment composition at each section is represented by five size fractions.

<b>Field</b>	<b>Variable</b>	<b>Value</b>	<b>Description</b>
0	IA	GS	Record identification characters
1	DFF	+	Geometric mean diameter of the smallest size fraction in mm
2	PC	+	Fraction of bed material in this size range

Continue with other DFF's and PC's in the increasing order of sediment diameter.

**GB Records** - These optional records are used to define time variation of stage (water-surface elevation) at a cross section. The first set of GB records is placed before all cross section records (X1); it specifies the downstream stage. When the GB option is used, it supersedes other methods for determining the downstream stage. Other sets of GB records may be placed in other parts of the data set; each specifies the time variation of stage for the cross section immediately following the GB records.

<b>Field</b>	<b>Variable</b>	<b>Value</b>	<b>Description</b>
First GB Record			
0	IA	GB	Record identification characters
Succeeding GB Record(s)			
0	IA	GB	Record identification characters
1	BSLL(1)	+	Base level of point 1, in ft or m
2	TMBL(1)	+	Time coordinate of point 1, in hours
3	BSLL(2)	+	Base level of point 2, in ft or m
4	TMBL(2)	+	Time coordinate of point 2, in hours

Continue with additional elevations and time coordinates, in the increasing order of time.

**GQ Records** - These optional records are used to define stage-discharge relation at the downstream section. The GQ input data may not be used together with the GB records.

<b>Field</b>	<b>Variable</b>	<b>Value</b>	<b>Description</b>
First GQ Record			
0	IA	GQ	Record identification characters
1	KQL	+	Number of points used to define base-level changes
Succeeding GQ Record(s)			
0	IA	GQ	Record identification characters
1	BSLL(1)	+	Base level of point 1, in ft or m
2	TMQ(1)	+	Discharge of point 1, in cfs or cms
3	BSLL(2)	+	Base level of point 2, in ft or m
4	TMQ(2)	+	Discharge of point 2, in cfs or cms

Continue with additional elevations and discharges, in the increasing order of discharge.

**GI Records** - These optional records are used to define time variation of sediment discharge entering the study reach through the upstream cross section. The GI input data, if included, will supersede other methods for determining sediment inflow. The sediment inflow is classified into the

two following cases: (1) specified inflow at the upstream section, such as by a rating curve; and (2) sediment feeding, such as from a dam breach or from a sediment feeder. These two cases are distinguished. For the first case, the upstream section has a set of GS records for its bed material composition, placed right after the GR Records. The geometry of this section does not change. For the second case, the upstream section has a set of the GS records for its bed material composition. An additional imaginary section needs to be added placed after the upstream section, located at the distance of DX upstream from the upstream section. A set of GS records must be placed after the GR records to specify the sediment composition of the inflow sediment. The imaginary section does not change in geometry but the upstream section may undergo geometry changes.

<b>Field</b>	<b>Variable</b>	<b>Value</b>	<b>Description</b>
First GI Record			
0	IA	GI	Record identification characters
1	KGI	+	Number of points used to define time variation of sediment inflow.
Succeeding GI Record(s)			
0	IA	GI	Record identification characters
1	QSU(1)	+	Sediment discharge of point 1, in cubic ft or m (net volume) per second
2	TMGI(1)	+	Time coordinate of point 1, in hours
3	QSO(2)	+	Sediment discharge of point 2
4	TMGI(2)	+	Time coordinate of point 2.

Continue with additional sediment discharges and time coordinates, in the increasing order of time coordinates.

**X1 Record** - This record is required for each cross section (175 cross sections can be used for the study reach); it is used to specify the cross-sectional geometry and program options applicable to that cross-section. Cross sections are arranged in sequential order starting from downstream.

<b>Field</b>	<b>Variable</b>	<b>Value</b>	<b>Description</b>
0	IA	X1	Record identification characters
1	SECNO	+	Original section number from the map
2	NP	+	Total number of stations or points on the next GR records for current cross section

3-6

These fields (Fields 3 to 6) are not used in the model. Numbers in

these fields are ignored.

7	DX	+	Length of reach between current cross section and the next downstream section along the thalweg, in feet or meters
8	YFAC	0	Cross-section stations are not modified by the factor YFAC.
		+	Factor by which all cross-section stations are multiplied to increase or decrease area. It also multiplies YC1, YC2 and CPC in the XF record, and applies to the CI record.
9	PXSECE	0	Vertical or Z coordinate of GR points are not modified.
		±	Constant by which all cross-section elevations are raised or lowered
10	NODA	0	Cross section is subject to change.
		1	Cross section is not subject to change.

**XF Record** - This is an optional record used to specify special features of a cross section.

Field	Variable	Value	Description
0	IA	XF	Record identification characters
1	YC1	0	Regular erodible left bank
		+	Station of rigid left bank in ft or m, to the left of which channel is nonerodible. Note: This station is located at toe of rigid bank; its value must be non-zero and must be equal to one of the Y coordinates in GR records but not the first Y coordinate.
2	YC2	0	Regular erodible right bank
		+	Station of rigid right bank, to the right of which channel is non-erodible. Note: This station is located at toe of rigid bank; its value must be equal to one of the Y coordinates in GR records but not the last Y coordinate.
3	RAD	0	Straight channel with zero curvature
		+	Radius of curvature at channel centerline in ft or m. Center of radius is on same side of channel where the station (Y-coordinate) starts.
		-	Radius of curvature at channel centerline in ft or m. Center of radius is on opposite side of zero station. Note: RAD is used only if concave bank is rigid and so specified using the XF record. RAD produces a transverse bed scour due to curvature.
4	CN	0	Roughness of this section is the same as that given in Field 7 of the G1 record.
		+	Manning's <i>n</i> value for this section

5	CPC	0	Center of thalweg coincides with channel invert at this section.
		+	Station (Y-coordinate) of the thalweg in ft or m
6	IRC	0	Regular erodible cross section
		1	Rigid or nonerodible cross section such as drop structure or road crossing. There is no limit on the total number of such cross sections.
8	BSP	0	Slope of bank protection is the same as that given in Field 2 of the G3 record.
		+	Slope of bank protection at this section in BSP horizontal units on 1 vertical unit. Use 0.05 for vertical bank.
		5	Slope of rigid bank is defined by the GR coordinates.
9	BEFX	0	Bank erodibility factor is defined in Field 5 of the G1 record.
		+	A value between 0.1 and 1.0 for BEFX specifies the bank erodibility factor at this section.
	RWD	+	RWD is the width of bank protection of a small channel in the floodplain. Areas outside this zone remains erodible. RWD is specified by a value greater than 1 (ft or m) in this field. When RWD is used, BEFX is not specified.
10	TDZAM	0	Erodible bed layer at this section is defined by TDZAMA in Field 6 of the G3 record.
		+	Thickness of erodible bed layer in ft or m. Only one decimal place is allowed for this number.
	ENEBC	±	Elevation of non-erodible bed, used to define the crest elevation of a grade-control structure which may be above or below the existing channel bed. In order to distinguish it from TDZAM, ENEB must have the value of 1 at the second decimal place. For example, the ENEB value of 365 should be inputted as 365.01 and the ENEB value of -5.2 should be inputted as -5.21. When ENEB is specified, it supersedes TDZAM and TDZAMA

**CI Record** - This is an optional record used to specify channel improvement options due to excavation or fill. The excavation option modifies the cross-sectional geometry by trapezoidal excavation. Those points lower than the excavation level are not filled. The fill option modifies the cross-sectional geometry by raising the bed elevations to a prescribed level. Those points higher than the fill level are not lowered. Excavation and fill can not be used at the same time. This record should be placed after the X1 and XF records but before the GR records. The variable ADDVOL in Field 10 of this record is used to keep track of the total volume of excavation or fill along a channel reach. ADDVOL specifies the initial volume of fill or excavation. A value greater or less than 0.1 needs to be entered in this field to keep track of the total volume of fill or excavation until another ADDVOL is defined.

Field	Variable	Description
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0	IA	G5	Record identification characters
1	CLSTA	+	Station of the centerline of the trapezoidal excavation, expressed according to the stations in the GR records, in feet or meter.
2	CELCH	+	Elevation of channel invert for trapezoidal channel, in feet or meters.
4	XLSS	+	Side slope of trapezoidal excavation, in XLSS horizontal units for 1 vertical unit.
5	ELFIL	+	Fill elevation on channel bed, in feet or meters.
6	BW	+	Bed width of trapezoidal channel, in feet or meters. This width is measured along the cross section line; therefore, a larger value should be used if a section is skewed.
10	ADDVOL	0	Volume of excavation or fill, if any, is added to the total volume already defined.
		+	Initial volume of fill on channel bed, in cubic feet or cubic meters.
		-	Initial volume of excavation from channel bed, in cubic feet or meters.

**GR Record** - This record specifies the elevation and station of each point for a digitized cross section; it is required for each X1 record.

Field	Variable	Value	Description
0	IA	GR	Record identification characters
1	Z1	"	Elevation of point 1, in ft or m. It may be positive or negative.
2	Y1	"	Station of point 1, in ft or m
3	Z2	"	Elevation of point 2, in ft or m
4	Y2	"	Station of point 2, in ft or m

Continue with additional GR records using up to 399 points to describe the cross section. Stations should be in increasing order.

**SB Record** - This special bridge record is used to specify data in the special bridge routine. This record is used together with the BT and GR records for bridge hydraulics. This record is placed between cross sections that are upstream and downstream of the bridge.

Field	Variable	Value	Description
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0	IA	SB	Record identification characters
1	XK	+	Pier shape coefficient for pier loss
2	XKOR	+	Total loss coefficient for orifice flow through bridge opening
3	COFQ	+	Discharge coefficient for weir flow overtopping bridge roadway
4	IB	+	Bridge index, starting with 1 from downstream toward upstream
5	BWC	+	Bottom width of bridge opening including any obstruction
6	BWP	0	No obstruction (pier) in the bridge
		i	Total width of obstruction (piers)
7	BAREA	+	Net area of bridge opening below the low chord in square feet
9	ELLC	+	Elevation of horizontal low chord for the bridge
10	ELTRD	+	Elevation of horizontal top-of-roadway for the bridge

**BT Record -** This record is used to compute conveyance in the bridge section. The BT data defines the top-of-roadway and the low chord profiles of bridge. The program uses the BT, SB and GR data to distinguish and to compute low flow, orifice flow and weir flow.

Field	Variable	Value	Description
0	IA	BT	Record identification characters
1	NRD	+	Number of points defining the bridge roadway and bridge low chord to be read on the BT records
2	RDST(1)	+	Roadway station corresponding to RDEL(1) and XLCEL(1)
3	RDEL(1)	+	Top of roadway elevation at station RDST(1)
4	XLCEL(1)	+	Low chord elevation at station RDST(1)
5	RDST(2)	+	Roadway station corresponding to RDEL(2) and XLCEL(2)
6	RDEL(2)	+	Top of roadway elevation at station RDST(2)
7	XLCEL(2)	+	Low chord elevation at station RDST(2)

Continue with additional sets of RDST, RDEL, and XLCEL.

**EJ Record** - This record is required following the last cross section for each job. Each group of records beginning with the T1 record is considered as a job.

Field	Variable	Value	Description
0	IA	EJ	Record identification characters
1-10			Not used

## II. INPUT PREPARATION FOR TRIBUTARIES

Tributaries may be included in the simulation following either a simplified approach or a detailed approach. Mixed usage of these two approaches is not currently permitted.

In the simplified approach, cross-sectional data for a tributary are not required; the tributary water discharge is specified in the G2 record; and tributary inflow of sediment is related to the water inflow.

Cross-sectional data are required in the detailed approach. Such cross sections are arranged in sequence from the confluence toward upstream just as for the main channel cross sections. They are placed in the input file after the main channel cross sections. In addition, the following input specifications are required:

- (1) Use a negative sign for the first tributary section number, SECNO, in Field 1 of the X1 record. This section number is designated as ITR in the model.
- (2) Use a negative sign for a section number IHP1, IHP2, etc. in the G2 record. This section number in the main channel is designated as ITM in the model.
- (3) Include a GS record just after the cross-sectional data of the main stream. Place another GS record after the cross-sectional data of the tributary and just before the EJ record. This GS record is used to specify the bed-material composition at the upstream section of the tributary.

Nine tributaries for detailed analysis are currently allowed for a job. When selecting this option, unsteady routing may not be used.

## III. OUTPUT DESCRIPTION

Output of the model include initial bed-material compositions, time and spatial variations of the water-surface profile, channel width, flow depth, water discharge, velocity, energy gradient, median sediment size, and bed-material discharge. In addition, cross-sectional profiles are printed at different time intervals.

Symbols used in the output are generally descriptive, some of them are defined below:

SECTION	Cross section
TIME	Time on the hydrograph
DT	Size of the time step or $\Delta t$ in sec
W.S.ELEV	Water-surface elevation in ft or m
WIDTH	Surface width of channel flow in ft or m
DEPTH	Depth of flow measured from channel invert to water surface in ft or m
Q	Discharge of flow in cfs or cms
V	Mean velocity of a cross-section in fps or mps
SLOPE	Energy gradient
D50	Median size or $d_{50}$ of sediment load in mm
QS	Bed-material discharge for all size fractions in cfs or cms
FR	Froude number at a cross section
N	Manning's roughness coefficient
SED.YIELD	Bulk volume or weight of sediment having passed a cross section since beginning of simulation, in cubic yards or tons.
WSEL	Water-surface elevation, in ft or m
Z	Vertical coordinate (elevation) of a point on channel boundary at a cross-section, in ft or m
Y	Horizontal coordinate (station) of a point on channel boundary at a cross-section, in ft or m
DZ	Change in elevation during the current time step, in ft or m
TDZ	Total or accumulated change in elevation, in ft or m

#### IV. RUNNING THE MODEL

The executable file of FLUVIAL-12, FL12.EXE, may be run on a Personal Computer or a main-frame computer. To run it on a PC, just type the command FL12. The computer will respond by requesting the input file name and then the output file name. A math coprocessor is required for the PC.

The device codes for running this program on a main-frame computer are as follows: 1 for READ, 3 for WRITE into an output file, and 5 for WRITE at the terminal.

#### V. IMPORTANT MESSAGES FOR INPUT PREPARATION

1. The computing time of this program is sensitive to the reach length between two adjacent cross sections, DX. Very small reach lengths which may result in excessive computing time should be avoided. In HEC-2, a downstream section and an upstream section are usually used at each bridge crossing, but these two sections should be combined into one, if possible, for the FLUVIAL application.

2. The GR points used to define the ground profile should be selected to provide an accurate definition of the initial profile. As such, sufficient points should be used for each cross section. Also, large spacing between adjacent points should be avoided even if there is no difference in initial elevation. Detailed results rely upon the adequate number of points used. Use Field 10 of G5 record

to insert points by interpolation.

3. The number of GR points used in defining the ground profile also affects the computing time because these points are executed a great number of times for each job. Points that are definitely outside the flow boundary level should be deleted during initial editing. However, because of the possibility for bank erosion, there should be sufficient points to cover any such potential changes.

4. Ineffective flow areas should be specified, either by excluding them from the GR points or by raising the GR elevations above the water level.

5. Very fine sediments with a grain size less than 0.0625 mm constitute the wash load and should normally be excluded from the size-fraction data on GS records.

6. The bank erodibility factor, BEF, in Field 5 of Record G1, is a control for the rate of channel widening. A small value slows down widening. This value should be calibrated against field data whenever possible.

7. The radius of curvature, RAD, in Field 3 of the XF record should be specified if lateral migration is simulated. The rate of lateral migration is controlled by RAD and the bank erodibility factor BEFX in Field 9 of the G3 record. In using this option, YC1 or YC2 should not be specified.

8. The radius of curvature  $r_c$  (or RAD) along a reach between two adjacent cross sections is computed by interpolating those defined at the cross sections. Since  $r_c$  has infinite value at a straight section, its adjacent reaches also have infinite  $r_c$ . For this reason, a curved reach must be between cross sections with finite  $r_c$  values.

## APPENDIX C. SAMPLE INPUT LISTINGS

T1        UPPER SAN DIEGO RIVER NEAR CHANNEL ROAD  
 T2        FOR SCOUR PREDICTION AT CHANNEL ROAD AFFECTED BY SAND MINING  
 T3        100-YEAR FLOOD, PEAK Q = 32000 CFS  
 G1    5.1    190.20      720        3        0.5                    0.04    19.98    189.00    12.0  
 G2    11        40  
 G2    1250        0      1800        2      3200        8.5      10880        14      32000        19.8  
 G2    32000      20.1    22400      26      9600        34      7540        38      3200        50  
 G2    1400      50.1    4760        54      14000      60      9800        66      2800        70  
 G2    1250      70.1    3040        73      3800        75      2800        80      1250        90  
 G2    1250      90.1    3040        93      3800        95      2800        100     1250        120  
 G2    1250      120.1    3040        123     3800        125     2800        130     1250        140  
 G2    1400      140.1    4760        144     14000      150     9800        156     2800        170  
 G2    1250      170.1    3040        173     3800        175     2800        180     1250        190  
 G3    0.005  
 GS    0.2        0.2      0.75        0.2      1.50        0.2      2.80        0.2      6.5        0.2  
 GQ    5  
 GQ    365        500      367        1400     368      2500        374     7000        378     34000  
 NC    0.04      0.04      0.050      0.1      0.3  
 ET    5.1        7.1      5.1      1480      2200      1480      2050  
 X1    730        33      1442.0     2506.4    770      670      889.  
 XF                  0.045  
 GR    381.4      1240.4    385.5      1248.9    385.1    1281.3    381.9    1287.2    381.8    1344.2  
 GR    380.9      1418.1    383.3      1423.8    383.7    1442.0    380.2    1450.2    373.6    1462.3  
 GR    371.3      1477.7    370.2      1538.5    369.6    1639.5    369.1    1690.7    367.9    1700.8  
 GR    366.9      1768.1    364.9      1794.5    363.8    1813.3    364.7    1867.4    368.5    1881.3  
 GR    369.2      1928.7    368.9      1962.0    366.4    1972.1    364.5    1981.5    366.1    1987.1  
 GR    365.8      2005.0    365.2      2006.3    365.2    2164.4    367.0    2167.6    380.0    2214.7  
 GR    380.0      2264.0    380.0      2300      380.0    2400  
 ET    5.1        7.1      9.1      1167.7     1800      1167.7    1700      1167.7    1850  
 X1    734        23      1167.7     1880.1    470      695      550      .95  
 GR    383.7      1100.0    383.7      1167.8    375.2    1179.4    371.2    1192.3    372      1221.7  
 GR    370.6      1266.5    370.9      1297.9    372.2    1314.7    371.1    1333.6    367.8    1347.4  
 GR    366.0      1382.7    367.4      1394.9    369.7    1408.6    371.2    1440.4    370.6    1523.1  
 GR    370.7      1629.9    371.8      1700.0    386.0    1735.0    386.4    1794.7    386.8    1821.3  
 GR    387.0      1900.0    387.4      1950      387.8    2000  
 NC                  .3      .5  
 ET    5.1        7.1      5.1      820      1575      820      1470      1000      1350  
 X1    738        30      785      1773.9    300      255      298      .82  
 GR    393.6      785      393.6      785.1    392.4    793.5    387      810      382.3    823.8  
 GR    371        860      371      967.1      371      1006.6    371      1028.3    371      1040.8  
 GR    371.0      1059.7    371      1074.3    371      1101.2    369.5    1112.6    367.3    1144.7  
 GR    368.5      1158.1    368.7      1175.8    370.0    1187.1    372.7    1203.2    372.3    1268.1  
 GR    373.7      1297.5    373.3      1372.5    371.9    1382.6    371.6    1417.4    369.6    1441.5  
 GR    369.6      1470.0    388.0      1507.0    388.5    1597.4    389.0    1694.1    390.0    1800.3  
 QT    3      32000      32000      3200  
 NC    .060      .050      .035  
 ET    5.1        7.1      5.1      720      1475      720      1370      315      1150  
 X1    740        30      680      1751.8    130      130      172      .82

XF					750						
GR	390	680	390	680.05	390	680.1	375	731.3	375	813.5	
GR	375	840.4	374.7	856.6	372.7	867.8	372.6	982.3	372.7	1028.6	
GR	373.6	1063.3	374.8	1074.1	373.8	1084.6	373.6	1101.5	376.3	1116.0	
GR	373.6	1132.8	373.6	1157.4	373.6	1184.7	373.6	1197.2	373.2	1210.1	
GR	373.0	1224.9	373.7	1261.1	372.3	1294.9	374.4	1318.2	372.9	1370.8	
GR	389.0	1403.0	389.6	1540.3	390.0	1629.5	390.3	1674.2	390.5	1750.0	
ET		5.1	7.1	5.1	680	950	680	905	550	800	
X1	741	18	680	905	0	875	350				
XF					800						
GR	390	680	385	720	380	770	375	790	373	800	
GR	373	810	373	860	373	870	375	880	380	900	
GR	385	905	385	950	385	1175	391	1187	391.5	1250	
GR	391.5	1300	391.7	1400	392	1500					
ET		5.1	7.1	5.1	420	700	420	700			
X1	744	44	420	655.0	195	205	315				
XF				0.035							
GR	401.6	0.0	399.9	40.8	395.7	62.5	394.4	95.7	394.6	151.7	
GR	394.4	206.1	392.8	272.1	392.5	356.9	392.3	420	390	430	
GR	385	455	380	480	375	490	373	500	373	581.8	
GR	373.0	600	373	610	375	620.0	380.0	630.0	385.0	640	
GR	390.0	655	391.0	700	391.6	835.7	389.6	1194.5	389.9	1316.4	
GR	390.6	1407.6	392.6	1454.4	392.7	1537.6	393.8	1614.2	393.5	1656.5	
GR	391.9	1705.9	392.7	1792.7	392.9	1881.6	393.5	1973.0	394.0	2089.8	
GR	393.6	2185.3	393.5	2206.6	393.0	2216.3	393.7	2228.0	394.5	2288.3	
GR	403.0	2315.7	413.5	2335.4	414.8	2337.6	416.2	2358.3			
NC	.050	.050	.045								
ET		5.1	7.1	5.1	50	870	300	730			
X1	750	45	115.6	629.2	245	250	307				
GR	400.8	0.0	401.0	16.9	399.1	29.3	396.5	35.6	394.6	59.4	
GR	394.7	86.3	390.9	99.6	389.6	115.6	385.9	123.9	381.4	133.0	
GR	380.0	182.8	379.6	255.9	377.3	281.8	377.3	415.2	377.3	527.8	
GR	379.0	532.9	379.1	584.9	377.5	595.6	377.5	605.7	380.0	616.1	
GR	390.7	629.2	391.7	691.1	393.2	760.5	409.3	763.4	409.3	834.1	
GR	393.8	837.5	393.8	908.5	392.3	919.5	393.2	926.6	393.6	1040.7	
GR	393.2	1152.6	393.1	1222.8	393.8	1320.3	393.3	1416.1	393.9	1526.0	
GR	394.8	1646.2	396.9	1679.0	397.4	1735.9	398.3	1810.4	398.1	1885.5	
GR	396.6	1908.9	399.2	1926.1	402.8	1940.8	406.2	1974.6	407.0	1998.3	
NC	.035	.050	.070	.1	.3						
ET		5.1	7.1	5.1	1	744.6	70	620			
X1	760	44	73.3	620.7	415	715	547				
GR	406.1	0.0	406.5	29.9	399.9	41.2	398.6	57.7	394.3	73.3	
GR	386.7	87.9	381.9	95.6	382.3	129.4	378.3	136.2	377.9	186.8	
GR	377.4	258.2	377.8	283.5	380.1	294.7	381.2	335.6	380.9	401.8	
GR	383.3	426.0	383.3	480.5	380.8	498.6	383.1	508.7	384.2	539.1	
GR	382.3	554.2	382.9	583.2	385.4	601.0	392.4	620.7	394.0	641.7	
GR	395.6	705.1	396.8	744.6	394.4	792.8	395.2	835.2	397.0	880.1	
GR	398.9	987.4	398.3	1025.7	397.6	1086.3	397.9	1156.8	399.7	1168.8	
GR	404.9	1187.5	408.2	1203.4	408.6	1266.0	409.3	1311.5	402.5	1325.9	
GR	397.4	1341.7	397.9	1405.0	399.3	1476.3	398.3	1612.4			

ET		7.1				220	897.3		
X1	764	29	246.4	703.8	770	690	731		
GR	407.6	0.0	405.9	23.8	403.8	30.8	402.6	76.3	401.6
GR	402.4	204.5	395.4	216.4	386.7	233.6	388.9	246.4	386.3
GR	386.1	280.7	381.6	291.0	380.4	322.9	380.1	390.3	379.5
GR	380.4	469.4	381.7	532.9	381.4	556.4	379.6	569.3	379.3
GR	379.9	638.2	381.3	677.0	383.7	684.6	389.8	692.1	393.9
GR	395.6	731.1	395.9	793.7	396.9	850.8	396.7	897.3	
ET		5.1	7.1	5.1	380	1335	400	1335	
X1	765	42	493.7	1228.6	660	160	604		
GR	411.6	0.0	411.7	64.8	406.3	79.3	398.4	98.1	396.5
GR	396.4	191.7	397.2	285.4	395.9	335.7	396.2	444.8	395.7
GR	392.5	515.9	390.1	528.0	391.1	537.3	390.2	569.5	388.7
GR	385.4	630.8	384.3	653.4	383.2	658.0	384.9	663.7	387.9
GR	387.6	708.6	386.9	732.1	386.1	769.8	385.2	834.1	383.7
GR	383.9	875.9	385.6	894.3	388.9	959.4	388.7	1040.4	386.3
GR	389.1	1065.0	390.3	1122.2	393.1	1186.4	395.5	1228.6	395.7
GR	396.5	1369.3	399.1	1472.8	399.1	1582.3	400.0	1666.6	399.9
GR	399.4	1905.3	399.6	2008.9					
X1	770	35	493.7	1228.6	400	400	400		1
GR	396.4	191.7	397.2	285.4	395.9	335.7	396.2	444.8	395.7
GR	392.5	515.9	390.1	528.0	391.1	537.3	390.2	569.5	388.7
GR	385.4	630.8	384.3	653.4	383.2	658.0	384.9	663.7	387.9
GR	387.6	708.6	386.9	732.1	386.1	769.8	385.2	834.1	383.7
GR	383.9	875.9	385.6	894.3	388.9	959.4	388.7	1040.4	386.3
GR	389.1	1065.0	390.3	1122.2	393.1	1186.4	395.5	1228.6	395.7
GR	396.5	1369.3	399.1	1472.8	399.1	1582.3	400.0	1666.6	399.9
GS	0.2	0.2	0.75	0.2	1.50	0.2	2.80	0.2	6.5
EJ									0.2

#### APPENDIX D. SAMPLE OUTPUT LISTINGS

##### INITIAL BED MATERIAL COMPOSITION

SECTION	SIZE MM	FRACTION								
730.00	0.20	0.200	0.75	0.200	1.50	0.200	2.80	0.200	6.50	0.200
734.00	0.20	0.200	0.75	0.200	1.50	0.200	2.80	0.200	6.50	0.200
738.00	0.20	0.200	0.75	0.200	1.50	0.200	2.80	0.200	6.50	0.200
740.00	0.20	0.200	0.75	0.200	1.50	0.200	2.80	0.200	6.50	0.200
741.00	0.20	0.200	0.75	0.200	1.50	0.200	2.80	0.200	6.50	0.200
744.00	0.20	0.200	0.75	0.200	1.50	0.200	2.80	0.200	6.50	0.200
750.00	0.20	0.200	0.75	0.200	1.50	0.200	2.80	0.200	6.50	0.200
760.00	0.20	0.200	0.75	0.200	1.50	0.200	2.80	0.200	6.50	0.200
764.00	0.20	0.200	0.75	0.200	1.50	0.200	2.80	0.200	6.50	0.200
765.00	0.20	0.200	0.75	0.200	1.50	0.200	2.80	0.200	6.50	0.200
770.00	0.20	0.200	0.75	0.200	1.50	0.200	2.80	0.200	6.50	0.200

THE ENGELUND-HANSEN SEDIMENT FORMULA IS USED

TIME = 5.10 HRS DT = 100 SECS TIME STEP = 0

SECTION	W.S.ELEV.	WIDTH	DEPTH	Q	V	SLOPE	D50	QS/Q	FR	SED. YIELD
	FT	FT	FT	CFS	FPS		MM	1000 PPM		C. Y.
730.00	367.97	384.5	4.17	2467	2.71	0.00215	1.39	1.62	0.31	0.903E+01
734.00	371.32	384.6	5.32	2467	5.75	0.02074	1.67	32.80	0.96	0.182E+03
738.00	373.40	461.6	6.10	2467	2.23	0.00113	1.32	0.54	0.25	0.300E+01
740.00	374.29	390.6	1.99	2467	5.62	0.01967	1.69	29.81	0.94	0.166E+03
741.00	377.53	110.2	4.53	2467	5.98	0.00450	1.54	6.57	0.54	0.366E+02
744.00	378.60	144.4	5.60	2467	3.36	0.00073	1.45	0.61	0.26	0.339E+01
750.00	379.24	352.9	1.94	2467	4.52	0.00826	1.54	7.84	0.64	0.436E+02
760.00	381.81	292.5	4.41	2467	3.33	0.00234	1.50	1.35	0.37	0.752E+01
764.00	383.07	395.0	3.77	2467	2.33	0.00106	1.39	0.52	0.25	0.287E+01
765.00	386.95	236.0	3.75	2467	6.74	0.01854	1.67	38.42	0.95	0.214E+03
770.00	389.87	432.7	5.67	2467	2.56	0.00164	1.50	0.99	0.30	0.553E+01

TIME = 9.96 HRS DT = 395 SECS TIME STEP = 60

SECTION	W.S.ELEV.	WIDTH	DEPTH	Q	V	SLOPE	D50	QS/Q	FR	SED. YIELD
	FT	FT	FT	CFS	FPS		MM	1000 PPM		C. Y.
730.00	371.65	706.9	6.55	5239	2.09	0.00075	0.54	0.58	0.20	0.349E+04
734.00	372.51	487.6	8.73	5239	4.43	0.00440	1.52	7.73	0.50	0.135E+05
738.00	374.04	512.6	4.87	5239	4.89	0.00649	1.93	11.97	0.60	0.104E+05
740.00	375.19	514.5	4.94	5239	5.13	0.00768	2.74	12.76	0.64	0.137E+05
741.00	376.90	117.4	6.10	5239	8.07	0.00500	2.94	12.69	0.60	0.121E+05
744.00	378.48	146.4	4.92	5239	7.63	0.00423	2.77	10.11	0.62	0.802E+04
750.00	380.56	452.5	3.80	5239	4.45	0.00403	1.49	8.22	0.49	0.825E+04
760.00	382.82	381.6	4.98	5239	4.97	0.00464	1.22	9.24	0.53	0.670E+04
764.00	385.35	404.2	4.06	5239	3.89	0.00221	0.57	5.23	0.38	0.716E+04
765.00	387.37	287.5	6.06	5239	6.09	0.00632	1.76	16.18	0.62	0.230E+05
770.00	390.07	454.1	5.87	5239	4.97	0.00586	1.50	13.30	0.57	0.151E+05

TIME = 16.80 HRS DT = 720 SECS TIME STEP = 96

SECTION	W.S.ELEV.	WIDTH	DEPTH	Q	V	SLOPE	D50	QS/Q	FR	SED. YIELD
	FT	FT	FT	CFS	FPS		MM	1000 PPM		C. Y.
730.00	376.08	735.7	7.75	21069	5.57	0.00322	0.88	12.01	0.43	0.362E+05
734.00	377.83	509.3	7.88	21069	7.65	0.00449	1.85	19.44	0.58	0.870E+05
738.00	379.18	509.8	10.27	21069	7.56	0.00432	1.44	15.02	0.57	0.100E+06
740.00	379.93	536.2	9.40	21069	8.05	0.00571	2.36	22.21	0.64	0.114E+06
741.00	381.02	210.2	11.29	21069	10.25	0.00374	2.22	19.74	0.58	0.121E+06
744.00	381.97	203.0	11.12	21069	10.77	0.00323	1.95	18.50	0.61	0.104E+06
750.00	384.27	488.6	7.52	21069	7.39	0.00379	1.40	16.65	0.54	0.921E+05

760.00	386.40	514.5	9.31	21069	7.32	0.00393	1.50	16.66	0.54	0.925E+05
764.00	389.22	469.7	6.61	21069	7.56	0.00391	1.59	16.68	0.55	0.912E+05
765.00	391.88	639.3	10.49	21069	6.85	0.00422	1.50	16.17	0.55	0.112E+06
770.00	393.59	659.4	9.39	21069	6.80	0.00429	1.50	16.21	0.55	0.104E+06

TIME = 19.99 HRS DT = 720 SECS TIME STEP = 117

SECTION	W.S.ELEV. FT	WIDTH FT	DEPTH FT	Q CFS	V FPS	SLOPE	D50 MM	QS/Q 1000 PPM	FR	SED. YIELD C. Y.
730.00	377.70	745.4	8.27	32000	7.46	0.00495	1.80	19.75	0.55	0.161E+06
734.00	379.97	516.5	9.49	32000	8.99	0.00450	2.02	19.80	0.60	0.224E+06
738.00	381.35	531.7	8.92	32000	9.02	0.00472	2.04	22.86	0.62	0.244E+06
740.00	382.13	543.9	9.73	32000	9.47	0.00574	2.57	25.55	0.67	0.260E+06
741.00	383.83	413.5	14.37	32000	9.18	0.00362	1.95	18.76	0.56	0.271E+06
744.00	384.35	265.7	12.52	32000	11.08	0.00292	1.65	19.85	0.59	0.240E+06
750.00	386.33	500.1	9.44	32000	8.50	0.00358	1.41	19.72	0.55	0.218E+06
760.00	388.34	522.5	10.69	32000	8.33	0.00355	1.48	18.99	0.54	0.220E+06
764.00	390.87	475.3	8.66	32000	8.68	0.00361	1.62	19.25	0.55	0.220E+06
765.00	393.47	683.6	12.04	32000	7.78	0.00405	1.49	19.34	0.56	0.238E+06
770.00	395.11	699.4	10.91	32000	7.75	0.00410	1.50	19.34	0.56	0.230E+06

ID

10 SECTION 765.00 TIME = 19.99 HRS WS = 393.47 WIDTH = 683.6

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
411.60	0.00	0.00	0.0	411.70	0.00	0.00	64.8	406.30	0.00	0.00	79.3
398.40	0.00	0.00	98.1	396.50	0.00	0.00	106.6	396.40	0.00	0.00	191.7
397.20	0.00	0.00	285.4	395.90	0.00	0.00	335.7	396.20	0.00	0.00	444.8
395.70	0.00	0.00	493.7	392.50	0.00	0.00	515.9	390.12	0.00	0.02	528.0
391.12	0.00	0.02	537.3	390.22	0.00	0.02	569.5	388.09	0.00	-0.61	624.2
383.34	0.00	-2.06	630.8	381.43	0.00	-2.87	653.4	381.43	0.00	-1.77	658.0
383.66	0.00	-1.24	663.7	387.18	0.00	-0.72	668.6	387.61	0.00	0.01	708.6
386.85	0.00	-0.05	732.1	384.32	0.00	-1.78	769.8	383.09	0.00	-2.11	834.1
381.49	0.00	-2.21	851.4	381.80	0.00	-2.10	875.9	384.54	0.00	-1.06	894.3
388.93	0.00	0.03	959.4	388.74	0.00	0.04	1040.4	386.40	0.00	0.10	1054.1
389.13	0.00	0.03	1065.0	390.32	0.00	0.02	1122.2	393.10	0.00	0.00	1186.4
395.50	0.00	0.00	1228.6	395.70	0.00	0.00	1312.3	396.50	0.00	0.00	1369.3
399.10	0.00	0.00	1472.8	399.10	0.00	0.00	1582.3	400.00	0.00	0.00	1666.6
399.90	0.00	0.00	1791.8	399.40	0.00	0.00	1905.3	399.60	0.00	0.00	2008.9

ID

9 SECTION 764.00 TIME = 19.99 HRS WS = 390.87 WIDTH = 475.3

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
407.60	0.00	0.00	0.0	405.90	0.00	0.00	23.8	403.80	0.00	0.00	30.8
402.60	0.00	0.00	76.3	401.60	0.00	0.00	122.8	402.40	0.00	0.00	204.5

395.40	0.00	0.00	216.4	384.79	0.00	-1.91	232.4	388.88	0.00	-0.02	246.4
383.82	0.00	-2.48	271.2	384.70	0.00	-1.40	280.5	382.67	0.00	1.07	289.6
382.60	0.00	2.20	322.9	382.51	0.00	2.41	390.3	382.41	0.00	2.91	440.7
382.40	0.00	2.00	469.4	382.34	0.00	0.64	532.9	382.29	0.00	0.89	556.4
382.26	0.00	2.66	569.3	382.21	0.00	2.91	620.9	382.87	0.00	2.97	638.2
383.24	0.00	1.94	677.6	383.52	0.00	-0.18	687.0	387.25	0.00	-2.55	692.2
393.90	0.00	0.00	703.8	395.60	0.00	0.00	731.1	395.90	0.00	0.00	793.7
396.90	0.00	0.00	850.8	396.70	0.00	0.00	897.3				

ID

8 SECTION 760.00 TIME = 19.99 HRS WS = 388.34 WIDTH = 522.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
406.10	0.00	0.00	0.0	406.50	0.00	0.00	29.9	399.90	0.00	0.00	41.2
398.60	0.00	0.00	57.7	394.30	0.00	0.00	73.3	387.06	0.00	0.36	88.1
383.88	0.00	1.98	96.8	382.05	0.00	-0.25	129.4	377.81	0.00	-0.49	136.0
377.67	0.02	-0.23	186.8	377.67	0.02	0.27	258.2	377.67	0.02	-0.13	283.5
379.65	0.00	-0.45	294.7	380.53	0.00	-0.67	335.6	380.14	0.00	-0.76	402.1
383.28	0.00	-0.02	426.0	383.29	0.00	-0.01	480.5	380.34	0.00	-0.46	498.3
383.09	0.00	-0.01	508.7	384.23	0.00	0.03	539.1	382.30	0.00	0.00	554.1
384.82	0.00	1.92	582.1	385.99	0.00	0.59	600.7	392.40	0.00	0.00	620.7
394.00	0.00	0.00	641.7	395.60	0.00	0.00	705.1	396.80	0.00	0.00	744.6
394.40	0.00	0.00	792.8	395.20	0.00	0.00	835.2	397.00	0.00	0.00	880.1
398.90	0.00	0.00	987.4	398.30	0.00	0.00	1025.7	397.60	0.00	0.00	1086.3
397.90	0.00	0.00	1156.8	399.70	0.00	0.00	1168.8	404.90	0.00	0.00	1187.5
408.20	0.00	0.00	1203.4	408.60	0.00	0.00	1266.0	409.30	0.00	0.00	1311.5
402.50	0.00	0.00	1325.9	397.40	0.00	0.00	1341.7	397.90	0.00	0.00	1405.0
399.30	0.00	0.00	1476.3	398.30	0.00	0.00	1612.4				

ID

7 SECTION 750.00 TIME = 19.99 HRS WS = 386.33 WIDTH = 500.1

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
400.80	0.00	0.00	0.0	401.00	0.00	0.00	16.9	399.10	0.00	0.00	29.3
396.50	0.00	0.00	35.6	394.60	0.00	0.00	59.4	394.70	0.00	0.00	86.3
390.90	0.00	0.00	99.6	389.60	0.00	0.00	115.6	385.63	0.62	-0.27	123.7
383.82	-0.01	2.42	134.2	380.50	-0.02	0.50	182.8	380.18	-0.03	0.58	255.9
377.67	-0.04	0.37	281.9	376.82	-0.07	-0.48	415.2	376.82	-0.07	-0.48	527.8
379.05	-0.05	0.05	532.9	379.28	-0.05	0.18	584.9	377.45	-0.06	-0.05	595.6
378.05	-0.05	0.55	605.4	383.53	0.29	3.53	614.9	390.36	0.00	-0.34	629.2
391.70	0.00	0.00	691.1	400.26	0.00	7.06	760.5	402.37	0.00	-6.94	763.4
402.77	0.00	-6.53	834.1	400.30	0.00	6.50	837.5	393.80	0.00	0.00	908.5
392.30	0.00	0.00	919.5	393.20	0.00	0.00	926.6	393.60	0.00	0.00	1040.7
393.20	0.00	0.00	1152.6	393.10	0.00	0.00	1222.8	393.80	0.00	0.00	1320.3
393.30	0.00	0.00	1416.1	393.90	0.00	0.00	1526.0	394.80	0.00	0.00	1646.2
396.90	0.00	0.00	1679.0	397.40	0.00	0.00	1735.9	398.30	0.00	0.00	1810.4
398.10	0.00	0.00	1885.5	396.60	0.00	0.00	1908.9	399.20	0.00	0.00	1926.1
402.80	0.00	0.00	1940.8	406.20	0.00	0.00	1974.6	407.00	0.00	0.00	1998.3

ID

6 SECTION 744.00 TIME = 19.99 HRS WS = 384.35 WIDTH = 265.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
401.60	0.00	0.00	0.0	399.90	0.00	0.00	40.8	395.70	0.00	0.00	62.5
394.40	0.00	0.00	95.7	394.60	0.00	0.00	151.7	394.40	0.00	0.00	206.1
392.80	0.00	0.00	272.1	392.50	0.00	0.00	356.9	386.14	-0.42	-6.16	420.0
384.03	0.07	-5.97	422.9	372.89	0.00	-12.11	442.6	372.89	0.00	-7.11	469.9
372.89	0.00	-2.11	487.2	372.89	0.00	-0.11	500.0	372.89	0.00	-0.11	581.8
372.89	0.00	-0.11	600.0	372.10	0.27	-0.90	610.0	372.10	0.27	-2.90	622.3
372.10	0.27	-7.90	634.9	372.10	0.27	-12.90	652.0	372.10	0.27	-17.90	668.1
391.00	0.00	0.00	700.0	391.60	0.00	0.00	835.7	389.60	0.00	0.00	1194.5
389.90	0.00	0.00	1316.4	390.60	0.00	0.00	1407.6	392.60	0.00	0.00	1454.4
392.70	0.00	0.00	1537.6	393.80	0.00	0.00	1614.2	393.50	0.00	0.00	1656.5
391.90	0.00	0.00	1705.9	392.70	0.00	0.00	1792.7	392.90	0.00	0.00	1881.6
393.50	0.00	0.00	1973.0	394.00	0.00	0.00	2089.8	393.60	0.00	0.00	2185.3
393.50	0.00	0.00	2206.6	393.00	0.00	0.00	2216.3	393.70	0.00	0.00	2228.0
394.50	0.00	0.00	2288.3	403.00	0.00	0.00	2315.7	413.50	0.00	0.00	2335.4
414.80	0.00	0.00	2337.6	416.20	0.00	0.00	2358.3				

ID

5 SECTION 741.00 TIME = 19.99 HRS WS = 383.83 WIDTH = 413.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
390.00	0.00	0.00	680.0	373.57	-1.20	-11.43	715.3	370.65	1.00	-9.35	739.2
370.65	1.13	-4.35	781.6	370.65	1.19	-2.35	800.0	370.65	1.16	-2.35	810.0
370.65	1.00	-2.35	860.0	370.65	0.97	-2.35	870.0	370.65	0.91	-4.35	889.1
370.65	0.86	-9.35	904.3	370.65	0.76	-14.35	933.6	379.88	-1.20	-5.12	951.5
385.00	0.00	0.00	1175.0	391.00	0.00	0.00	1187.0	391.50	0.00	0.00	1250.0
391.50	0.00	0.00	1300.0	391.70	0.00	0.00	1400.0	392.00	0.00	0.00	1500.0

ID

4 SECTION 740.00 TIME = 19.99 HRS WS = 382.13 WIDTH = 543.9

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
390.00	0.00	0.00	557.6	390.00	0.00	0.00	557.8	390.00	0.00	0.00	558.0
371.78	-0.65	-3.22	596.8	374.89	-0.70	-0.11	667.1	375.22	-0.64	0.22	689.1
375.26	-0.61	0.56	702.6	371.85	-0.55	-0.85	711.8	372.43	-0.62	-0.17	805.5
373.61	-0.52	0.91	843.5	375.88	-0.35	2.28	872.0	377.27	-0.26	2.47	880.8
376.45	-0.29	2.65	889.3	376.26	-0.29	2.66	903.4	378.59	-0.16	2.29	915.1
376.73	-0.23	3.13	928.7	377.28	-0.19	3.68	949.1	377.56	-0.16	3.96	971.5
377.67	-0.14	4.07	981.7	377.56	-0.14	4.36	992.3	377.56	-0.12	4.56	1004.4
378.18	-0.08	4.48	1034.1	377.73	-0.06	5.43	1061.8	379.60	0.90	5.20	1080.4
382.17	0.00	9.27	1119.7	389.00	0.00	0.00	1150.5	389.60	0.00	0.00	1263.0
390.00	0.00	0.00	1336.2	390.30	0.00	0.00	1372.8	390.50	0.00	0.00	1435.0

ID  
 3 SECTION 738.00 TIME = 19.99 HRS WS = 381.35 WIDTH = 531.7

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
393.60	0.00	0.00	643.7	393.60	0.00	0.00	643.9	392.40	0.00	0.00	650.7
387.00	0.00	0.00	664.2	382.30	0.00	0.00	675.5	375.05	0.15	4.05	701.6
373.55	0.16	2.55	793.0	374.38	0.16	3.38	825.4	374.05	0.16	3.05	843.2
373.90	0.16	2.90	853.5	373.68	0.16	2.68	869.0	373.50	0.17	2.50	880.9
373.17	0.17	2.17	903.0	373.02	0.17	3.52	912.3	372.60	0.17	5.30	938.7
372.78	0.17	4.28	949.6	373.01	0.17	4.31	964.2	373.16	0.17	3.16	973.4
373.92	0.16	1.21	986.6	374.14	0.16	1.84	1040.8	376.55	0.13	2.85	1063.9
375.54	0.14	2.24	1124.5	376.50	0.13	4.60	1133.7	376.74	0.13	5.14	1162.3
375.87	0.14	6.27	1182.0	379.79	0.08	10.19	1204.4	388.00	0.00	0.00	1235.7
388.50	0.00	0.00	1309.9	389.00	0.00	0.00	1389.2	390.00	0.00	0.00	1476.2

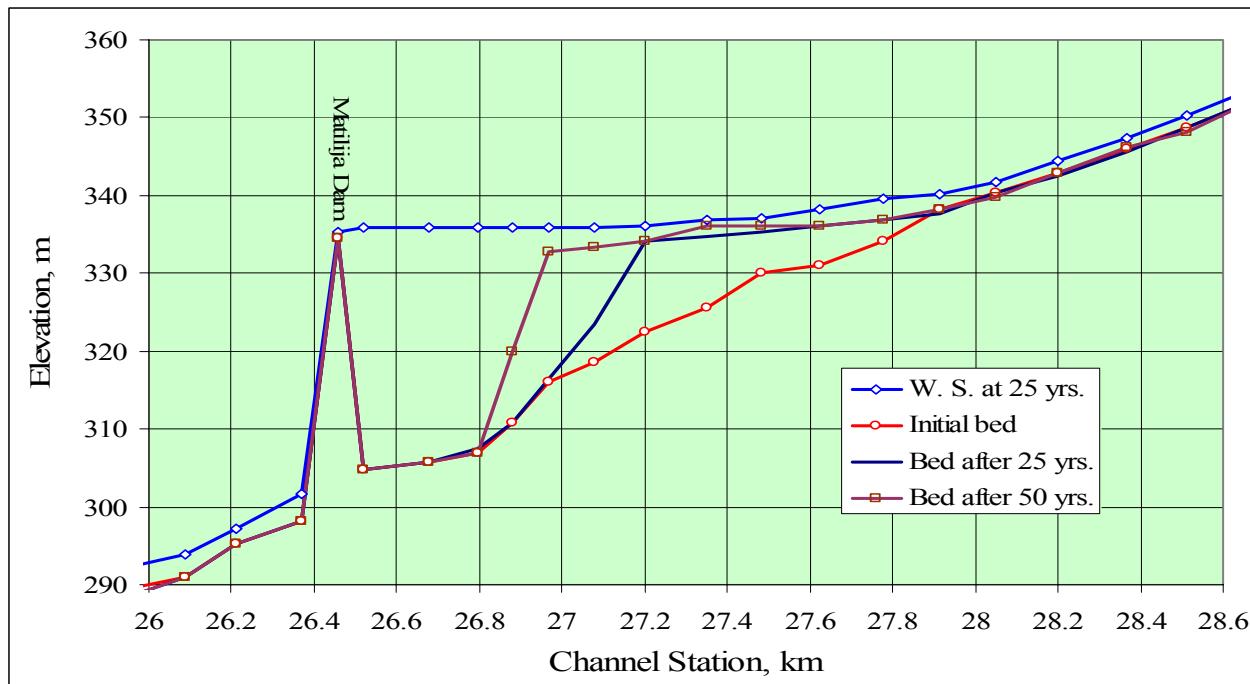
ID  
 2 SECTION 734.00 TIME = 19.99 HRS WS = 379.97 WIDTH = 516.5

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
383.70	0.00	0.00	1045.0	383.58	0.00	-0.12	1109.4	376.35	0.07	1.15	1120.4
373.59	0.09	2.39	1132.7	374.07	0.09	2.07	1160.6	372.86	0.10	2.26	1203.2
373.09	0.10	2.19	1233.0	374.06	0.09	1.86	1249.0	373.24	0.10	2.14	1266.9
370.64	0.12	2.84	1280.0	370.59	0.12	4.59	1313.6	370.61	0.12	3.21	1325.2
371.49	0.11	1.79	1338.2	373.36	0.10	2.16	1368.4	372.93	0.10	2.33	1446.9
373.30	0.10	2.60	1548.4	374.18	0.09	2.38	1615.0	386.00	0.00	0.00	1648.2
386.40	0.00	0.00	1705.0	386.80	0.00	0.00	1730.2	387.00	0.00	0.00	1805.0
387.40	0.00	0.00	1852.5	387.80	0.00	0.00	1900.0				

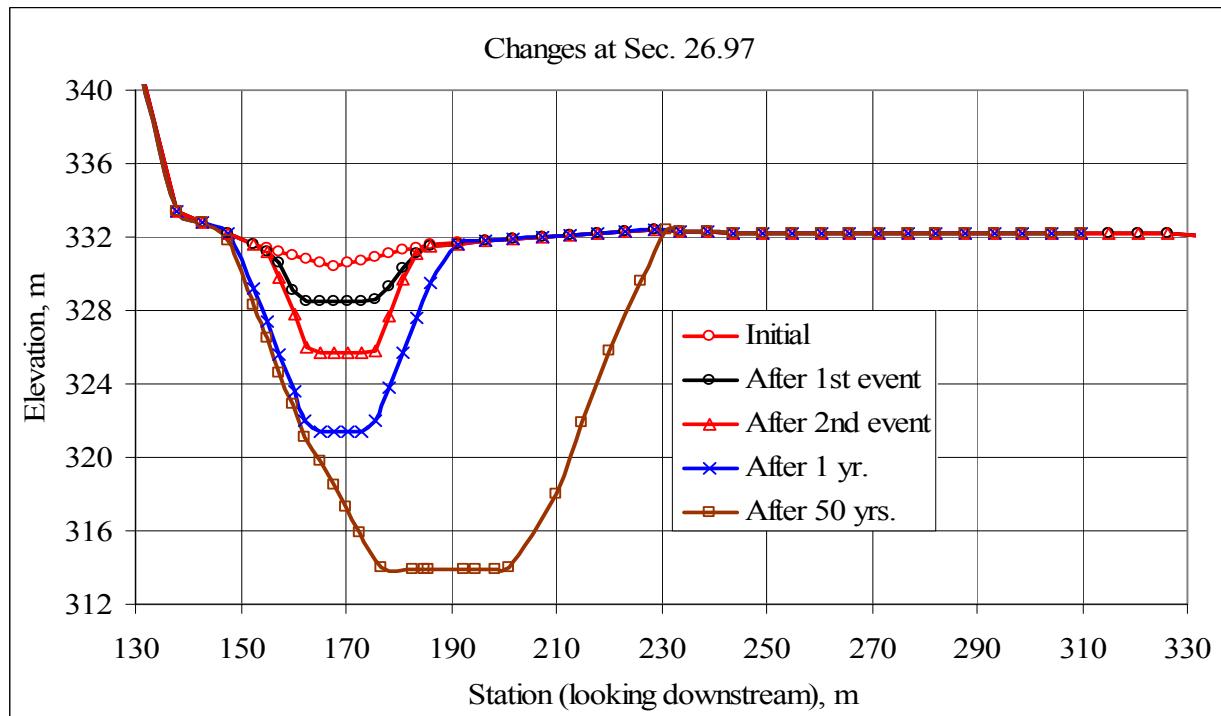
ID  
 1 SECTION 730.00 TIME = 19.99 HRS WS = 377.70 WIDTH = 745.4

Z	DZ	TDZ	Y	Z	DZ	TDZ	Y	Z	DZ	TDZ	Y
381.40	0.00	0.00	1240.4	385.50	0.00	0.00	1248.9	385.10	0.00	0.00	1281.3
381.90	0.00	0.00	1287.2	381.80	0.00	0.00	1344.2	380.90	0.00	0.00	1418.1
383.30	0.00	0.00	1423.8	383.70	0.00	0.00	1442.0	380.20	0.00	0.00	1450.2
375.30	0.00	1.70	1462.3	374.03	0.00	2.73	1477.7	373.35	0.00	3.15	1538.5
372.97	0.00	3.37	1639.5	372.65	0.00	3.55	1690.7	372.09	0.00	4.19	1700.8
371.55	0.00	4.65	1768.1	370.22	0.00	5.32	1794.5	369.44	0.00	5.64	1813.3
370.08	0.00	5.38	1867.4	372.32	0.00	3.82	1881.3	372.71	0.00	3.51	1928.7
372.52	0.00	3.62	1962.0	371.23	0.00	4.83	1972.1	369.94	0.00	5.44	1981.5
371.04	0.00	4.94	1987.1	370.84	0.00	5.04	2005.0	370.43	0.00	5.23	2006.3
370.43	0.00	5.23	2164.4	371.61	0.00	4.61	2167.6	380.00	0.00	0.00	2214.7
380.00	0.00	0.00	2264.0	380.00	0.00	0.00	2300.0	380.00	0.00	0.00	2400.0

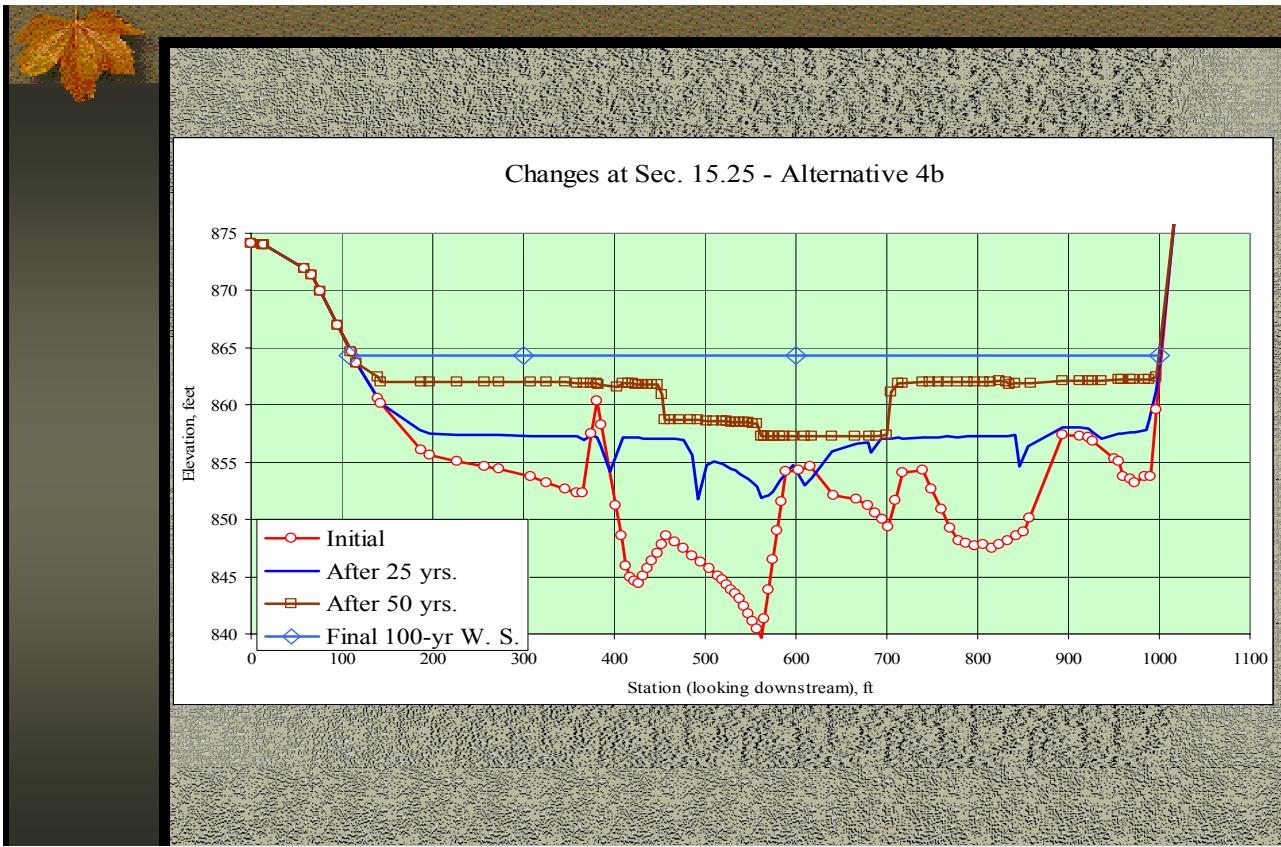
## SAMPLE GRAPHICAL RESULTS



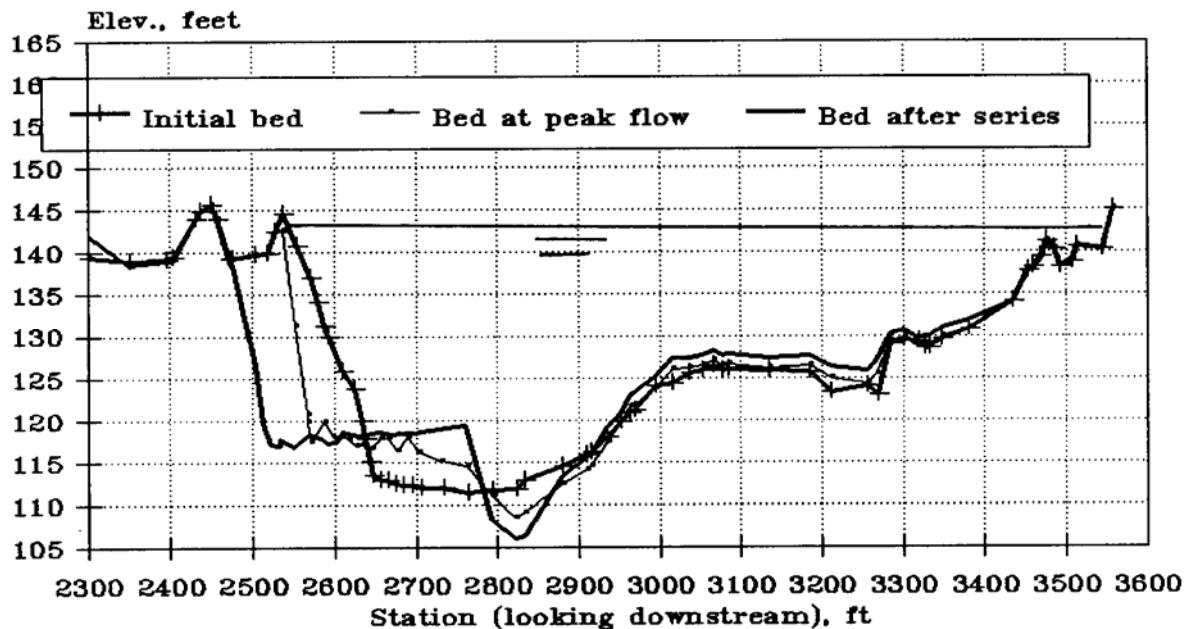
Longitudinal profiles of water surface and channel bed for sediment deposition in reservoir



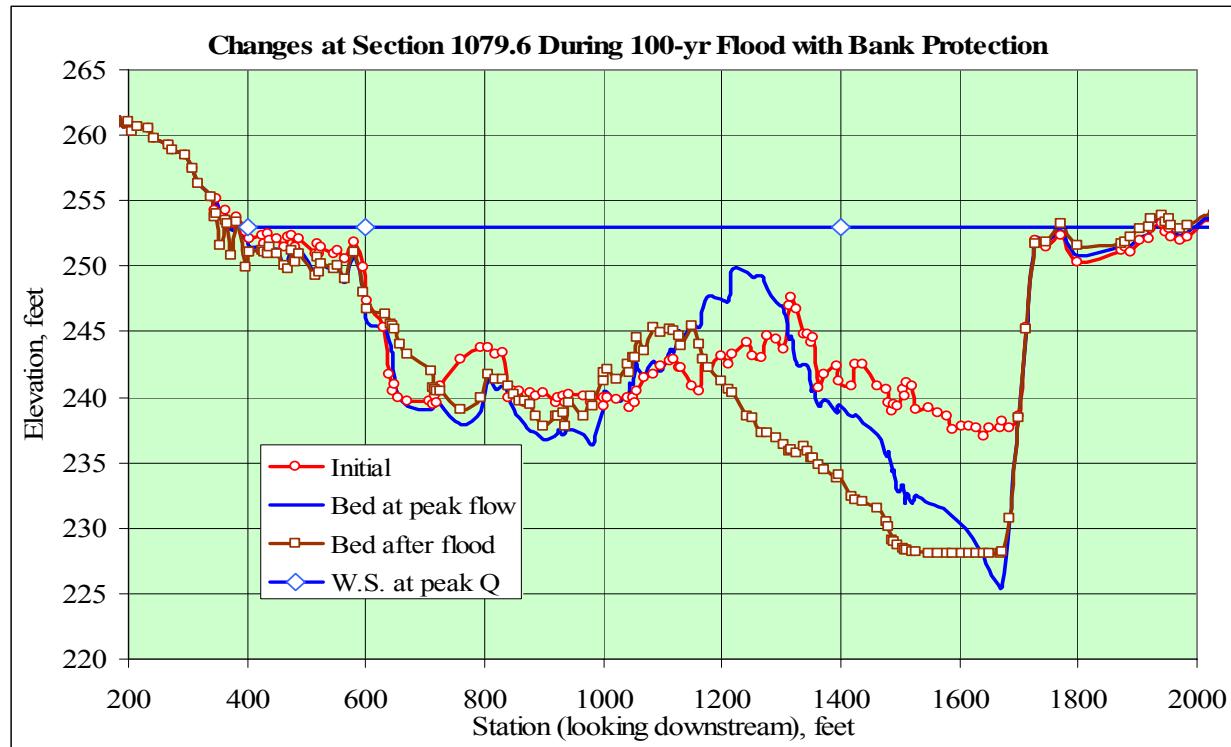
Changes in cross sectional profile during erosion of delta in reservoir after dam removal



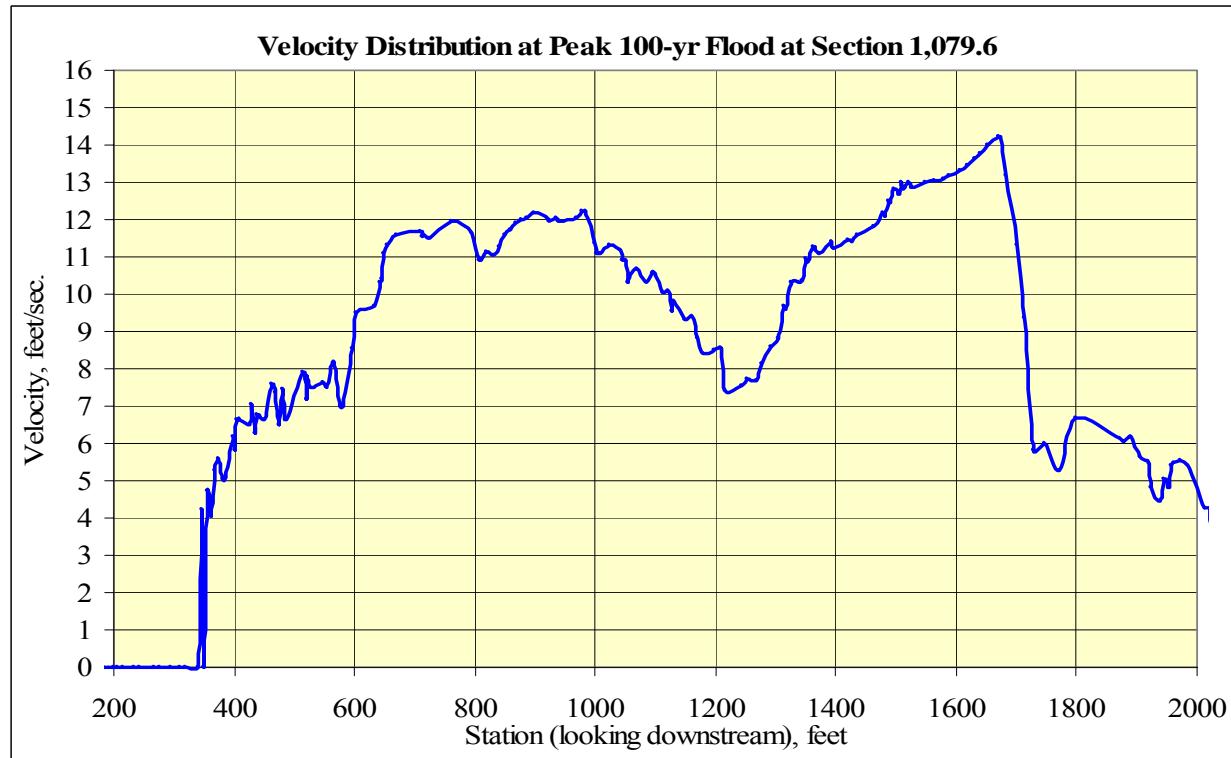
Sediment deposition in channel induced by check dam on downstream side



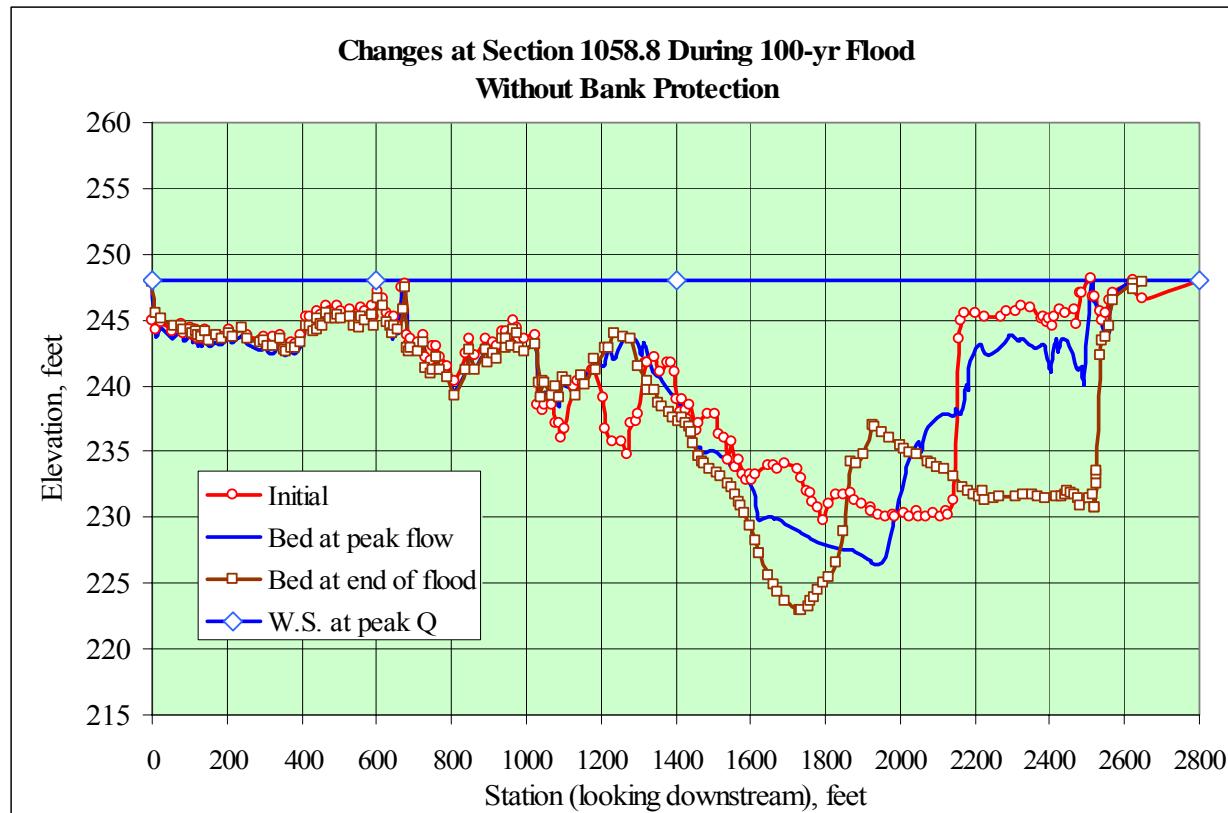
Cross sectional changes during lateral migration



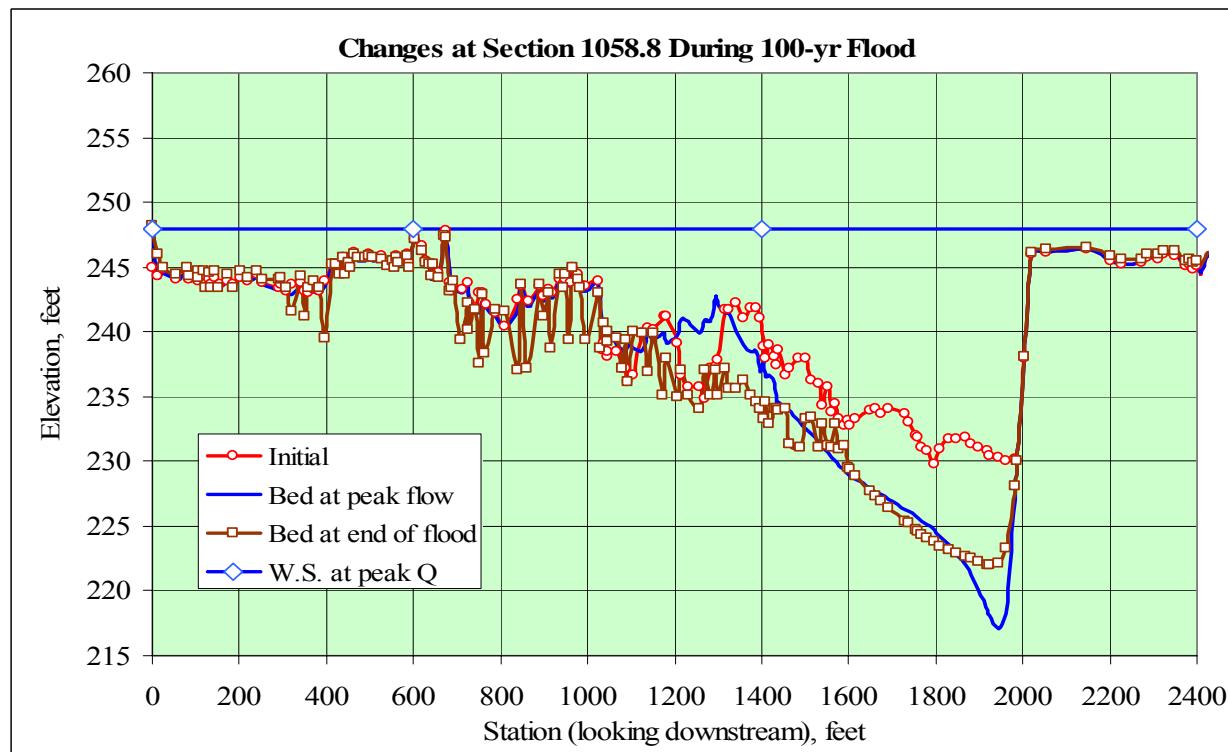
Bank protection along concave bank in curved channel



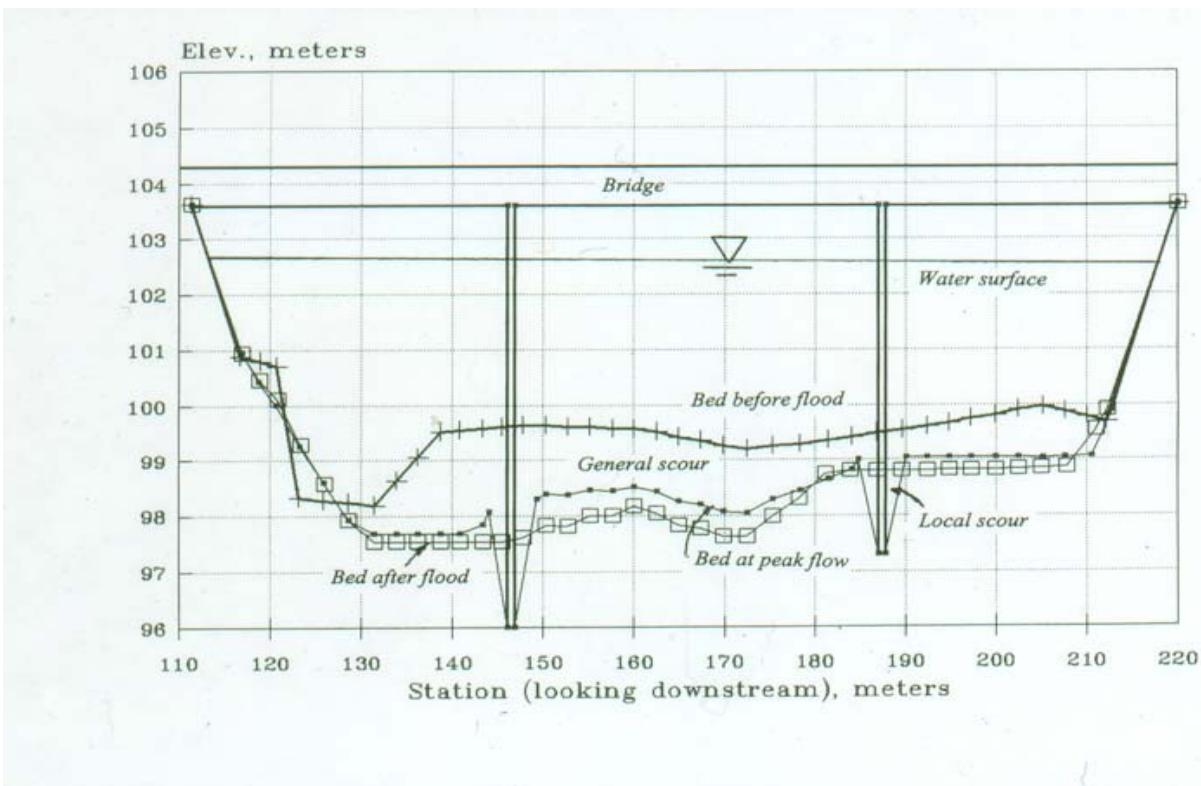
Velocity distribution at peak flow at the same cross section



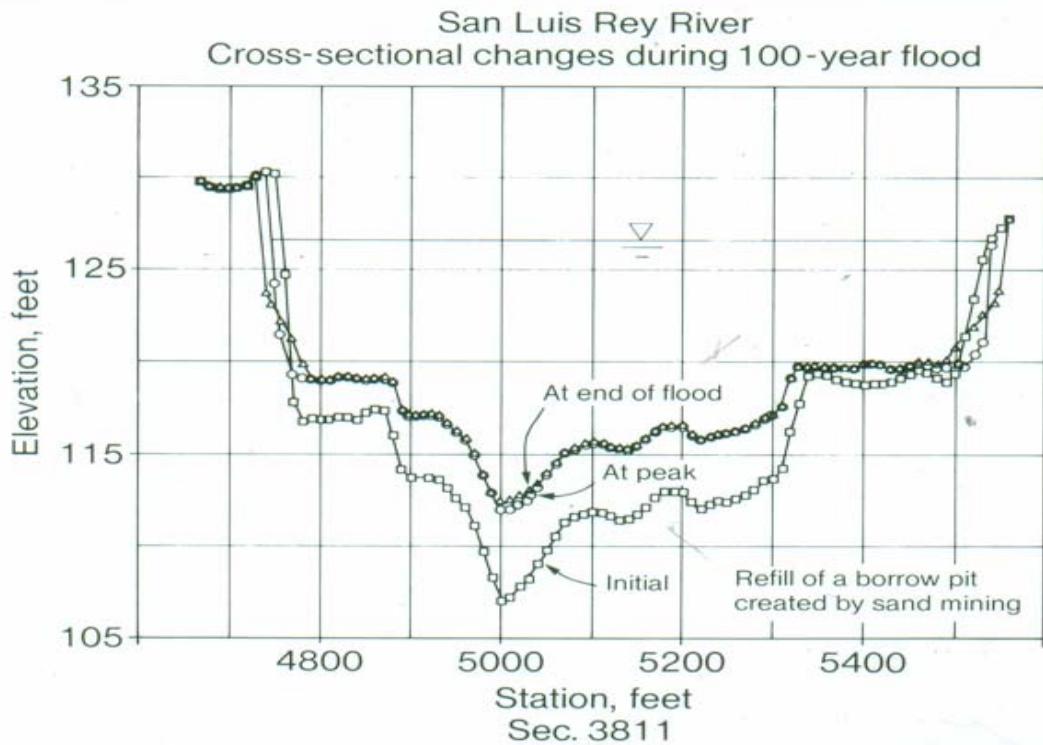
Cross-sectional changes with lateral migration



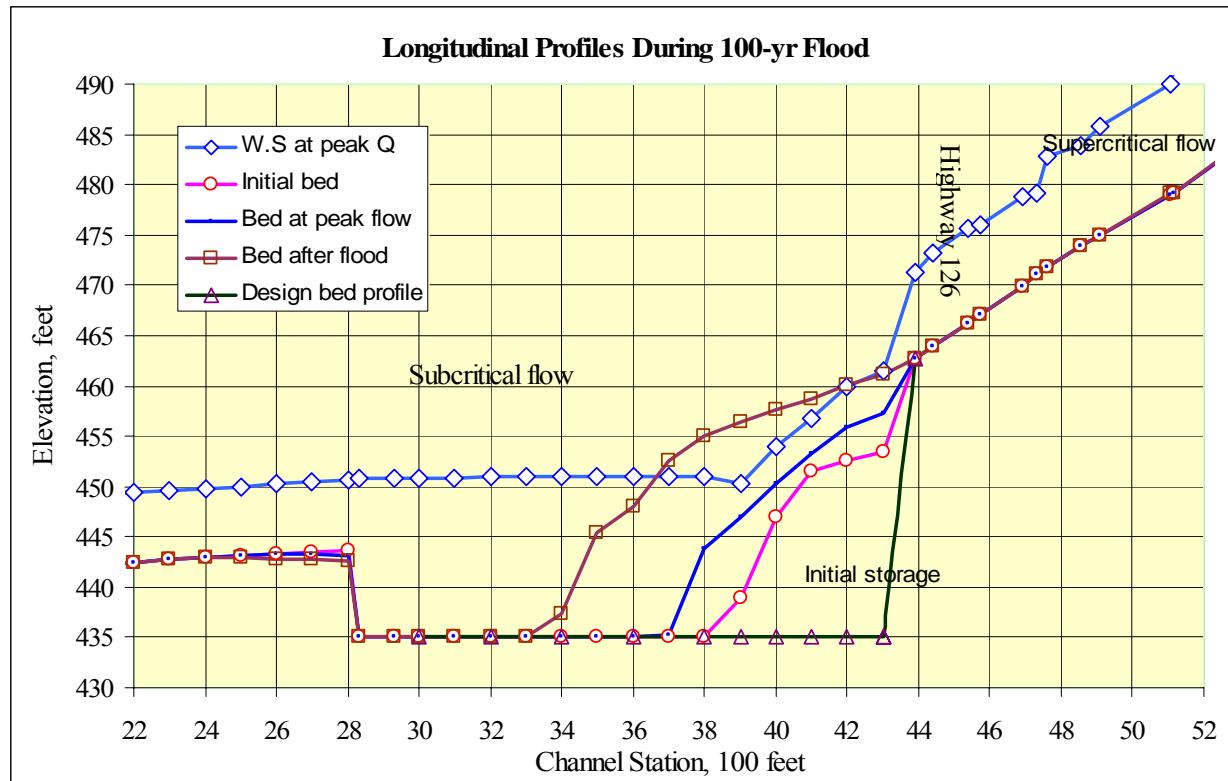
Bank protection along concave bank in curved channel



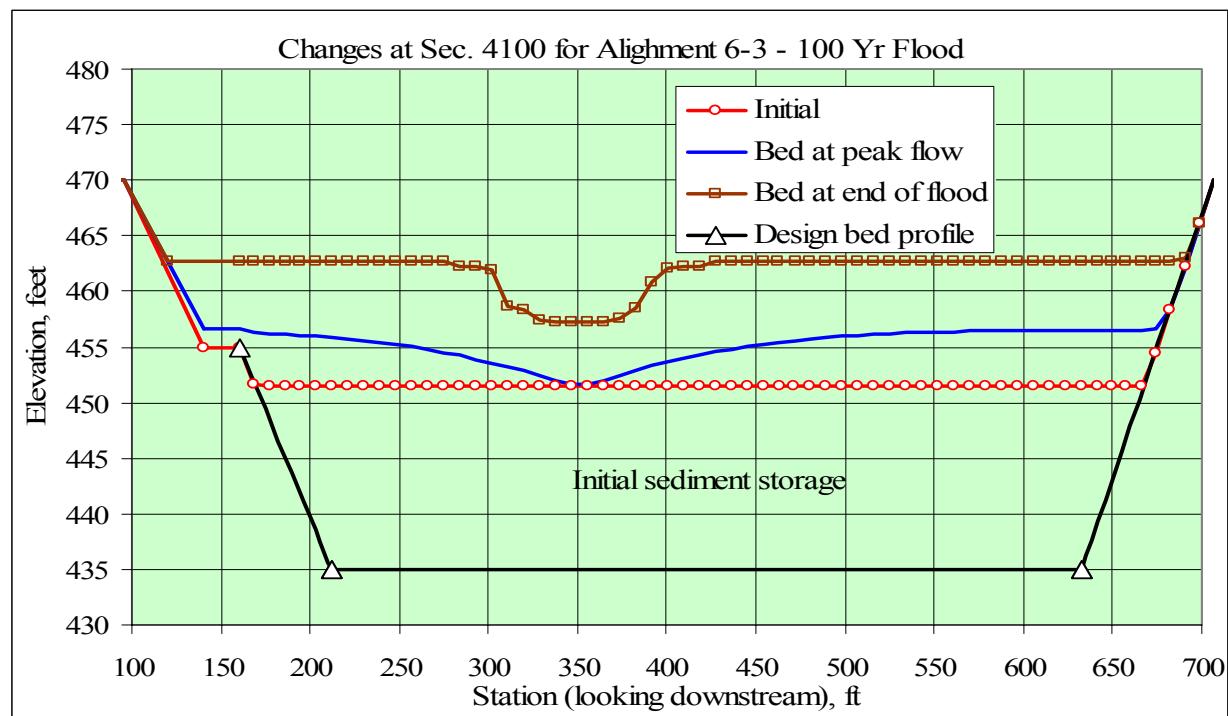
Scour prediction for bridge design



Refill of a sand pit by sediment deposition



Simulation of sediment deposition in a sediment basin



Cross sectional changes during deposition in sediment basin

## SELECTION OF MATHEMATICAL MODELS FOR RIVER AND RESERVOIR SEDIMENTATION

River channel behavior often needs to be studied for its natural state and response to human regulation. Studies of river hydraulics, sediment transport, and river channel changes may be through physical modeling, or mathematical modeling, or both. Physical modeling has been relied upon traditionally for river projects, but mathematical modeling is becoming more popular as its capabilities expand rapidly.

Mathematical models are developed based on convoluted physical relationships. The five most important relations are: continuity equation of flow, momentum equation of flow, continuity equation of sediment, sediment transport equation, and relations for channel deformation. These equations are applied at successive time steps to simulate the time-dependent processes. In selecting a model for application, the user should consider the necessary model feathers described below.

- (1) The model should have sound mathematical and physical bases. The allocation of scour and fill at a time step should be based on physical principles that can be verified using field data. Empirical relationships are considered in adequate for modeling river dynamics.
- (2) A mathematical model applicable to natural streams should be an *erodible boundary model* rather than an *erodible bed model*. The channel boundary changes are by no means uniformly distributed on the bed. The changes in channel width and bed profile are closely inter-related. For these reasons, the model must consider all boundaries of a river channel as free surfaces. These changes must be coupled at each time step.
- (3) The curvature effect on bed topography is an important feature for river morphology. Natural streams are seldom straight over a length longer than a few channel widths. The channel curvature, with its inherent secondary currents, has important effects on channel morphology; therefore, a mathematical model should possess this capability.
- (4) A model should allow the user to specify non-erodible parts of a channel, such as bank protection, grade control structures, check dams, etc.
- (5) The applicability of a model must be substantiated by adequate number of test and calibration studies using field data.

## COMPARISON OF FLUVIAL-12 AND HEC-6 MODELS

The FLUVIAL-12 model is an *erodible-boundary model*; it simulated inter-related changes in channel-bed profile, channel width and bed topography induced by the channel curvature. The erodible boundary model is different from an *erodible-bed model*, such as HEC-6 in the following ways.

- (1) The HEC-6 model does not simulate changes in channel width. Since changes in channel-bed profile is closely related to changes in width, these changes may not be separated.
- (2) The change in bed profile in HEC-6 is assumed to be uniform in the erodible zone. All points adjust up and down by the equal amount during aggradation and degradation. Actual bed changes are by no means uniform and therefore they may not be simulated by an erodible bed model.
- (3) An erodible bed model does not consider the channel curvature. In reality, the bed topography is highly non-uniform in a curved channel, especially during a high flow.
- (4) The erodible zone needs to be specified at all cross sections in the HEC-6 model. This means the model does not provide the extent of erosion in the channel, but the user has to inform the model about the erodible part of the channel bed. The boundary of erosion is computed and provided by the FLUVIAL-12 model, this boundary changes with the discharge and time.
- (5) The sediment inflow into the channel reach needs to be specified in the HEC-6 input. This requires the sediment rating curve which is usually not available for stream channels. In the FLUVIAL-12 model, the sediment inflow may be specified and it may also be computed based on the hydraulics of flow at the upstream section at every time step.
- (6) The FLUVIAL-12 model has been calibrated using 12 sets of river data. An erodible-bed model may not be calibrated with field data of natural streams.

## Data Requirements for Fluvial Study

Prepared by Howard H. Chang

- (1) Topographic maps of the Sacramento River for a channel reach at least two miles in length, with one mile minimum on each side of the intake structure. These maps should show locations of cross sections used for the HEC-2 study, if any.
- (2) Available digitized cross-sectional data used for HEC-2 studies for the stream reach from the downstream end to the upstream end of study. The locations of cross sections should be shown on the accompanying topographic maps. For stream reaches without such data, the consultant will prepare cross-sectional data based on the topographic maps.
- (3) Peak discharges of 10-, 50- and 100-yr floods and their variations along the study stream reach. The hydrographs for 100-yr floods are also required.
- (4) Existing mining sites and proposed mining plans, if any.
- (5) Plans for the proposed structure.
- (5) Plans for existing bridges and hydraulic structures, such as drop structures, bank protection, levees, etc. on the stream, if any.
- (6) At least two sediment samples along the study reach of each stream. Size distributions of such samples are normally determined based on the sieve analysis.

## USE AGREEMENT

An Agreement between Chang Consultants, Located at Rancho Santa Fe, California 92067-4492, U.S.A., hereinafter referred to as the "Developer" and \_\_\_\_\_ in California hereafter referred to as the "User."

WHEREAS the parties agree that subject to the following terms and conditions, the Developer shall deliver to the User in a machine-readable form FLUVIAL-12, a computer model hereinafter referred to as the "Product."

### I. Definitions

- A. The term "copy" shall mean any transfer in whole or in part of the product onto transportable machine-readable media.
- B. The term "use" shall mean any use whatsoever of the Product whether in whole or in part in its original mode or in any mode.

### II. Use of Product

- A. User agrees that the product shall be used only at the User's place of business or its contracted Computer Service Bureau.
- B. User agrees not to copy, release, disclose or otherwise make the Product available, in its original form, as received from the Developer.
- C. User agrees not to include the Product in an online commercially available terminal service established to offer service to people who are not a part of the User's organization. However, the User may use the product as a part of an online service offered wholly for the use of the User's employees.
- D. User agrees to notify the Developer of any physical defects in the Product within sixty (60) days following delivery of the Product by the Developer.

Developer:

User:

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Signature and Date

---

Signature and Date

---

Name

---

Title

Return to: Howard H. Chang, P.O. Box 9492, 6001 Avenida Alteras, Rancho Santa Fe, CA 92067-4492, U.S.A.

The FLUVIAL-12 model contains special and unique features, making it the most suitable model for the Salt River project as described below:

- (1) The model simulates river hydraulics, sediment delivery, and river channel changes, which include channel bed scour and fill, width changes and lateral migration. The Salt River, as an ephemeral river undergoes changes during floods, not only in the bed but also along the banks. Changes in channel bed and banks are interrelated, and thus they must be considered at the same time in a simulation study. The FLUVIAL-12 model is unique in that these changes are coupled at every time step. Other models are limited to changes of the bed (i.e., scour and fill) but not the banks.
- (2) The model includes the effects of secondary currents inherent in river channels. For this reason, the hydraulics, sediment transport and channel changes related to the channel curvature may be computed using the model. Bank erosion evaluation is an important task for the Salt River project, and it is specifically called out in the scope of work. Reaches of bank erosion are evident along the river and they need to be identified in the project. Continued erosion of concave banks will result in lateral migration of the channel. Lateral migration is an important concern for channel stability. The FLUVIAL-12 model is unique, as it is the only model that contains the features for curved channels.
- (3) Rivers in the arid western U. S. are highly dynamic as they may undergo rather rapid and significant changes in comparison to the eastern rivers. The FLUVIAL-12 model has been developed in the west, adopted to the dynamic nature of the western rivers. Most importantly, the model has been tested and calibrated based on more than five sets of river data. The simulation results by the model have been confirmed by field data.

