Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

April 7, 2006

Mr. Gregory Hogue
Office of Environmental Policy
and Compliance
Department of the Interior
Russell Federal Building
75 Spring Street, S.W., Suite 1144
Atlanta, Georgia 30303

Gentlemen:

BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2 AND 3 - RESPONSE TO FISH & WILDLIFE SERVICES' (F&WS) REQUEST FOR ADDITIONAL INFORMATION (RAI) ON NRC'S BIOLOGICAL ASSESSMENT OF TVA'S APPLICATION FOR BFN LICENSE RENEWAL

The purpose of this letter is to submit TVA's response to F&WS' RAI on NRC's Biological Assessment of TVA's application for BFN license renewal. Specifically, F&WS sent six RAIs to TVA on August 12, 2005, pertaining to BFN license renewal environmental issues. TVA's draft responses to these RAIs were discussed with F&WS personnel on October 27, 2005, in Birmingham, Alabama. Comments and recommendations received from F&WS during this meeting have been incorporated into TVA's responses.

The Enclosure to this letter provides TVA's responses to the six F&WS questions. If you have any questions regarding the information in this letter, contact R. M. Brown at (423) 751-7228.

Sincerely,

Glenn W. Morris

Glenn W. Morris
Manager, Corporate Nuclear Licensing
and Industry Affairs

A105

cc: See page 2

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The following provides TVA's responses to F&WS' six RAIs:

F&WS Question No.1:

We request more information regarding when and by whom aquatic/terrestrial survey efforts were conducted along the 160 miles of transmission line rights-of-way. We would also like to see results of some of these surveys. If surveys are incomplete, we would like a commitment to complete the aquatic and/or terrestrial surveys prior to any new construction or maintenance activity that may affect listed species known in the respective county or counties.

TVA RESPONSE:

TVA's Heritage staff in Knoxville regularly receives requests to review right-of-way (ROW) areas scheduled for vegetation management or other maintenance or modification activities. There are approximately 19,000 ROW miles in the TVA system and requests are received involving approximately one-third of these miles every year. Such a large workload means that it is not possible to field-survey miles. Instead, TVA utilizes the best tools available such as Heritage staffers who "fly" the transmission line corridors (using video available to them on TVA InsideNet computer files) to "see" the kinds of habitats present in the project area. They then overlay the ROW with records of sensitive plants and animals from the Heritage data base and consider the likelihood of any listed plant or animal to inhabit the section of line involved in the project. The standard criteria and guidelines developed years ago are then applied to make conservative vegetation and/or land management recommendations to the Power System Operations project managers.

In general, the listed species are assumed to be present, and the recommendations are conservatively made with the objective of protecting the species. Vegetation management recommendations can involve hand-clearing requirements, restrictions on use of herbicide sprays, bush hogging, etc. If there is ground-disturbing work to be done (e.g., pole replacement, lightning arrester installation, etc.), and the video fly-overs indicate likely habitat for a listed plant or animal, field visits are made to those project areas to check for the presence of listed species.

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The criteria and guidelines used by TVA's Heritage staff for protection of listed species potentially affected by power line work activities were shared with the F&WS when they were first developed, and again in a February 2005 demonstration session for visiting F&WS personnel. In both reviews, F&WS personnel concurred that these were reasonable methods to perform this work. If there is further interest by other F&WS personnel in reviewing this process, the Heritage staff would be pleased to schedule another session.

Attachment 1 contains a list of biologists, both TVA personnel and contractors that work directly on transmission line projects (such as re-clearing or pole replacement) that involve consideration of potential impacts on threatened and endangered species, wetlands, or natural areas. Included are staff personnel that do the desk-top reviews and/or field reviews, if necessary. Included with this list are three examples presented wherein actual field work was required because the database flagged potentially impacted species.

F&WS Question No.2:

Provide river bottom dissolved oxygen data for both winter and summer months under low and high flow conditions at and below BFN's diffuser pipes within the mixing zone and at the mixing zone edge, and describe any changes anticipated with the addition of Unit 1.

TVA RESPONSE:

Attachment 3 (Wheeler Profiles 1990-2005 Rev1.xls) contains profiles collected from Wheeler Reservoir at Tennessee River Mile (TRM) locations 277.0 (Wheeler Dam Forebay) and 295.9 (Transition zone ~2 miles upstream of BFN). Beginning in 1990, the sampling was conducted annually, but it was changed to every other year in 1995 to about 1998, and now it is back to annual monitoring due to the drought conditions of recent past years and the implementation of the River Operations study. The sampling was usually done once a month from April through September as part of the Vital Signs Monitoring program which targets the phytoplankton productive months and coincides with natural dissolved oxygen (DO) variability due to warming water temperatures and potential thermal stratification. The profiles are collected with a Hydrolab profile at the deepest part of the main channel at the given river mile. In general, data is taken starting at the reservoir bottom, followed by taking measurements

about every two meters to the surface. At TRM 295.9, the only DO recorded at <5mg/L (approximately 4.8 mg/L) was in the lower 3 meters of the water column in June 2001. Overall, DO conditions for the years monitored appear to be very good at this location.

Attachments 4 and 5 show special Hydrolab profiles for BFN collected on August 31, 2005, and September 14, 2005, at three locations: Below (i.e., downstream of) the BFN mixing zone at TRM 293.3, approximately 250 to 300-feet downstream from the river water temperature monitoring station; in the mixing zone at TRM 293.9, approximately 250 to 300-feet downstream from the diffusers; and at TRM 295.9, the normal transition zone monitoring location for Wheeler Reservoir, which is upstream from the mixing zone. On August 31, 2005, and September 14, 2005, Units 2 and 3 were operating at full power with no cooling towers in operation. These data further support the above conclusion that DO is very unlikely to be an issue in the river reach near BFN. In addition to not having any significant impact on the measured DO levels in, and downstream of, the mixing zone, the warmer water exiting the BFN diffusers is buoyant and rises to the surface rather than moving along the bottom of the reservoir, so its impact on benthic species is also minimal.

Some historical data are also available from monitoring conducted after Browns Ferry Unit 1 achieved initial criticality on August 17, 1973. Unit 1 began initial operation on October 15, 1973, and Units 2 and 3 began initial operation on August 28, 1974, and September 12, 1976, respectively. DO data are contained in reports of Water Quality and Biological Conditions in Wheeler Reservoir during operation of BFN from August 17, 1973, through December 31, 1980. During the period of operation covered by these reports, it was concluded that there was no apparent long-term alteration of water quality in Wheeler Reservoir due to the operation of BFN. This conclusion was based on statistical comparison of the quarterly means of water quality parameters from upstream and downstream stations, including DO.

Additional information regarding the anticipated impact of Unit 1 on DO is found in Section 4.3.6.3 of the Final Supplemental Environmental Impact Statement (FSEIS) for Operating License Renewal of the Browns Ferry Nuclear Plant in Athens Alabama, 2002, which describes the results of computer simulations using a two-dimensional water-quality model of Wheeler Reservoir. In general, the model predicts that the startup of Unit 1 will not have an adverse impact on DO. In fact, the model predicts that in areas downstream of the plant, the minimum level of DO will increase. This is primarily due to higher levels of

photosynthesis, induced by warmer water temperatures, created by the addition of heat from Unit 1. For example, at TRM 292.0, about 2 miles downstream of the diffusers, the model predicts that for a hot, dry year such as 1988, the minimum daily DO will increase by about 0.8 mg/L after the startup of Unit 1.

Other processes influencing DO are related to mixing induced by the plant diffusers. Bottom diffusers usually help to increase DO in bottom layers of the reservoir immediately downstream of the plant. This is due to upwelling of the river water as it flows up and over the diffuser pipes, and due to turbulence created by the jets from the diffuser ports. These processes mix oxygen-rich water in the surface region of the reservoir with water of lower DO in the bottom of the reservoir. These phenomena have been documented in studies performed for the TVA Sequoyah Nuclear Plant, located on the Tennessee River in the Chickamauga Reservoir (TVA, 1990). The startup of Unit 1 will increase reservoir mixing by the action of the diffuser jets. Any changes in DO created by these processes, however, will likely be small compared to the action of photosynthesis, as discussed above.

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F&WS Question No. 3:

Provide modeling data depicting the thermal plume within Wheeler Reservoir when all 3 nuclear plants are operating at full capacity (120% of their originally licensed power production capacity). Describe any differences expected in the extent of effects on bottom and top waters before and after startup of Unit 1.

TVA RESPONSE:

Attachment 6 contains a copy of a Power Point presentation showing the results of a three-dimensional simulation of the diffuser thermal effluent with all three units operating at extended power uprate (120 percent of originally licensed thermal power). The presentation is the same as that shown to F&WS in the meeting of October 27, 2005. The river flow is 10,000 cubic feet per second, the minimum daily average flow at BFN for the summer heating season, as targeted by TVA River Operations. The upstream ambient river temperature is 87°F, the approximate maximum temperature allowing sustained operation of BFN at full power without exceeding the maximum river temperature downstream of the plant specified in the NPDES permit. At higher ambient temperatures the plant would have to initiate a derate to protect the NPDES limit.

The results of the three-dimensional simulation represent the worst case scenario for conditions including all three BFN units operating at max generation with extended power uprate. Compared to the operation of Unit 2 and Unit 3, the startup of Unit 1 will increase the volume of waste heat in Wheeler Reservoir. Thus, with Unit 1, the spatial extent of the thermal discharge will be larger, both at the bottom and at the surface of the reservoir. However, the magnitude of the temperature extremes along the downstream boundary of the mixing zone will not change significantly, because of the plant requirements to maintain compliance with the NPDES river temperature limits.

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F&WS Question No.4:

Provide some discussion on the thermal plume produced by BFN and whether the thermal plume will/will not affect the host fish for listed mussel species within Wheeler Reservoir.

TVA RESPONSE:

Host Fish Impacts on Glochidia (mussel larvae)

The four threatened and endangered freshwater mussels (pink mucket, rough pigtoe, orangefoot pimpleback and fanshell) found in Wheeler Reservoir are all primarily located in the riverine section below Guntersville Dam (Figure 1). Known fish hosts for the pink mucket and rough pigtoe are all common reservoir species and are primarily sportfish except for freshwater drum and rosefin shiner (TVA 2005a) (Table 1). The orangefoot pimpleback and fanshell fish hosts are logperch, darters, and sculpins (TVA 2005a). Mettee (1996) reported no records of mottled sculpin, tangerine darters, or blotchside logperch in the highland rim region of Alabama. Rosefin shiners, greenside darters, and banded sculpins are found in tributary streams to Wheeler Reservoir; snubnose and banded darters are only found in the headwaters of the Elk River.

All of the reservoir fish species, acting or serving as mussel hosts, have the ability to detect temperature increases and avoid the river channel affected by BFN's diffusers. The thermal model illustrates that the left descending bank opposite of BFN is not affected by the thermal plume and provides passage for migrating host species. Baxter and Buchanan (1998) tracked sauger with radio telemetry and found that sauger did not have a channel location preference in the vicinity of BFN, and migration was not affected by the thermal plume. BFN's thermal variance of 90 °F (32.2 °C) does not exceed most of the fish host species upper lethal temperature limits.

The fanshell and orangefoot pimpleback have not been reported since 1978 and are considered very rare. The fish host species found in the Wheeler Reservoir are tolerant of high ambient river temperatures.

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Table 1 below lists the federally-threatened and endangered freshwater mussel species, corresponding fish host species, and water thermal tolerances of the host species found in Wheeler Reservoir (TVA 2005b).

Based on this information, TVA concludes that water temperatures at BFN do not adversely affect freshwater mussels or their fish hosts.

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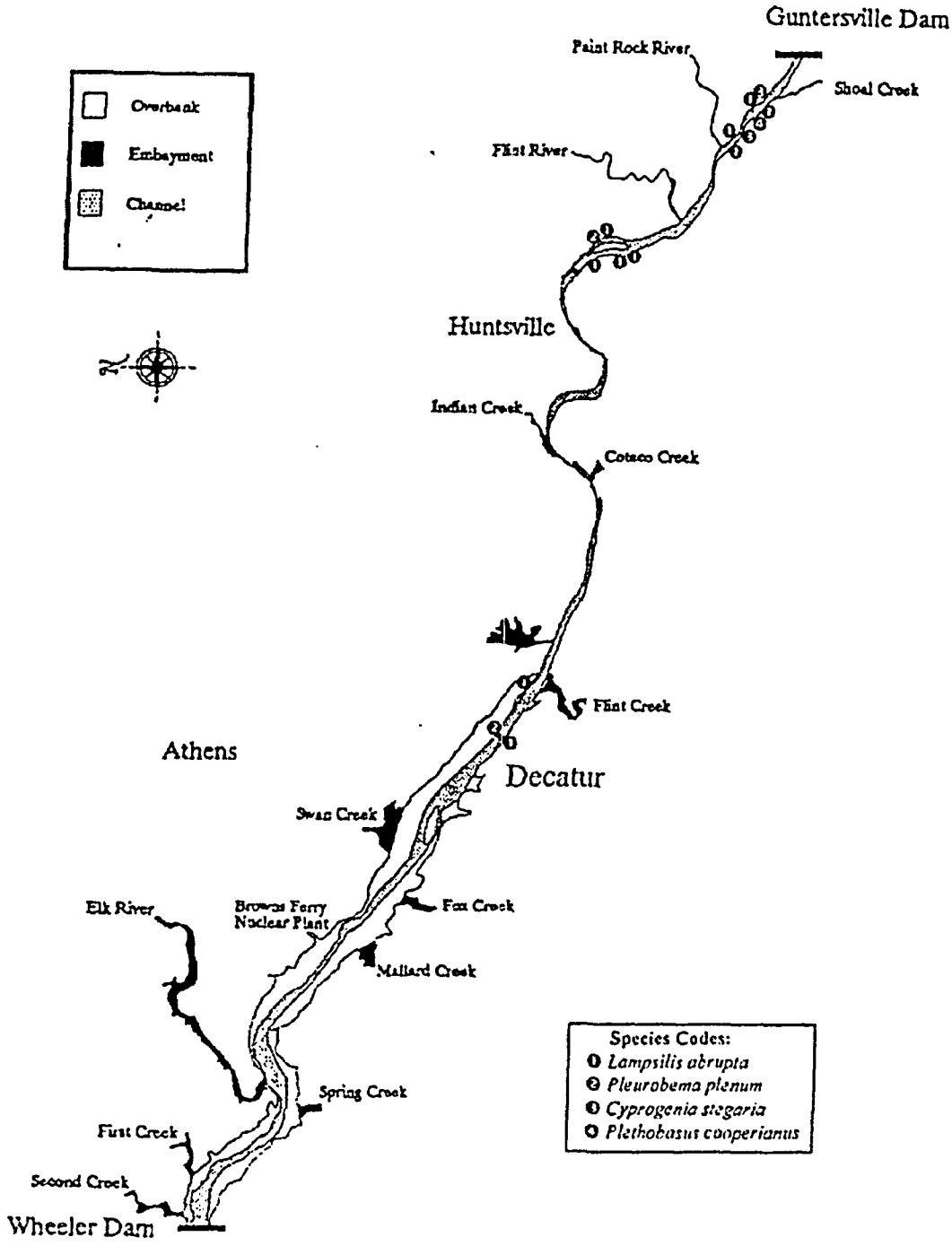

Figure 1. Survey Results of Threatened and Endangered Fresh Water Mussel Species Conducted in Wheeler Reservoir since 1978.

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Table 1. Fish Host Species, Distribution and Upper Temperature Tolerances of Four Threatened and Endangered Freshwater Mussel Species found in Wheeler Reservoir.

Common Name	Host Species	Distribution of Fish host species	*Upper Limit Temperature C
Lampsilis abrupta Pink Mucket	*Aplodinotus grunniens* Freshwater Drum	Reservoir Sp.	32.8-34.0
	Micropterus dolomieu Smallmouth Bass	Reservoir Sp.	35.0-36.3
	Micropterus punctulatus Spotted Bass	Reservoir Sp.	36.0
	Micropterus salmoides Largemouth Bass	Reservoir Sp.	30.6-36.4
	Pomoxis annularis White Crappie	Reservoir Sp.	32.0-32.8
	Stizostedion canadense Sauger	Reservoir Sp.	30.4-33.9
	Stizostedion vitreum Walleye	Reservoir Sp.	31.6-35
Pleurobema plenum Rough Pigtoe	*Lythurus ardens* Rosefin shiner	Tributaries to Wheeler Reservoir.	no records
	Lepomis Macrochirus Bluegill	Reservoir Sp.	35.5-37.3
Plethobasus cooperianus Orangefoot pimpleback	*Stizostedion canadense* Sauger	Reservoir Sp.	30.4-33.9
Cyrogenia stegaria Fanshell	*Cottus bairdi* Mottled Sculpin	Not found in Al Highland Rim	29.6-33.8
	Cottus carolinae Banded Sculpin	Tributaries to Wheeler Res.	no records
	Etheostoma blenniodes Greenside darter	Tributaries to Wheeler Res.	32.2
	Etheostoma simoterum Snubnose darter	Elk River Tributaries	no records
	Etheostoma zonale Banded darter	Elk River Tributaries	no records
	Percina aurantiaca Tangerine Darter	Not found in Al Highland Rim	no records
	Percina burtoni Blotchside Logperch	Not found in Al Highland Rim	no records
	Percina carrodes Logperch	Reservoir Sp.	26.0**

*The upper thermal limits for fish were taken from the report for the ORSANCO Temperature Criteria Re-evaluation, Appendix Table Z.1 database, C. O. Yoder, 2005.

**Denotes data endpoint derived from collected data for upper temperature limit for larvae. Logperch survive ambient water temperatures in Wheeler Reservoir higher than the reported endpoint temperature limit. Logperch have been collected in annual Vital Signs surveys downstream of BFN at Tennessee River Mile 292.5 (Baxter and Lowery 2005).

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Impacts On Reproductive Rates Via Impacts To Host Fish And Temperature Mortality Data For Larval Fishes, Not Just Adult Fish Mortality

Two species of special interest, sauger and yellow perch, were the focus of TVA's BFN thermal variance studies because both are considered coolwater species and are theoretically more susceptible to elevated water temperature. Based on results of the studies conducted from 1985 through 1992 (Baxter and Buchanan 1998), operation of BFN had no significant adverse impact on the reproductive success of either species, or the annual spawning migration of sauger past BFN. However, Maceina et al. (1998) found that sauger-spawning success was adversely impacted by over fishing and drought conditions (e.g., low flows and decreased turbidity) in the Tennessee Valley during 1985 through 1988.

TVA 2002, Chapter 4 Section 4.4.10.4, pages 4-46 through 4-48 stated that the flow studies conducted by TVA at BFN have indicated that the majority of water entrained originates from the right side of the main river channel. This pelagic area contains significantly lower densities of drifting fish larvae than found in the overbank areas (Figure 4.3.10-1). Higher densities of fish eggs (primarily freshwater drum eggs) are transported in the channel portion of the river, but entrainment of drum eggs (and larvae) has not resulted in noticeable decreased abundance of this species; nor is it expected to, under the increased condenser cooling water flow rates.

The thermal plume model illustrates that the plume rises rapidly towards the surface mixing with the ambient water. Very little bottom channel area is exposed to high temperatures. Larval sauger and eggs drifting past BFN would have very limited exposure to high temperatures due to their demersal nature of drifting close to the bottom. During the spring when saugers spawn, ambient temperatures would be much cooler compared to the worst case scenario temperature model.

Based on the information, TVA concludes that BFN does not adversely affect migration, reproductive rates, larval, juvenile, or adult fish host species in Wheeler Reservoir.

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Biological (Vital Signs) Monitoring After 3 Units Are Operating At EPU

TVA 2002, Chapter 4, Section 4.4.10.4, page 4-47, last paragraph, stated that TVA will confirm the expected levels of impingement and entrainment by monitoring under current 2-unit operation and following the return of Unit 1 to service. TVA's vital signs monitoring program will also continue to assess aquatic ecological communities in Wheeler Reservoir. Although not expected, if based on these monitoring studies it is determined that increased impingement and entrainment are resulting in unacceptable environmental impacts, TVA would assess the technologies, operational measures, and restoration measures that could be undertaken to remedy this and institute appropriate measures in consultation with appropriate federal and Alabama agencies.

All entrainment and impingement monitoring is conducted with the same procedures used during the pre-operational monitoring for BFN.

Literature cited

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Maceina, M. J., P. W. Bettoli, S. D. Finely, and V. J. DiCenzo. 1998. Analyses of the sauger fishery with simulated effects of a minimum size limit in the Tennessee River of Alabama. North American Journal of Fisheries Management 18: 66-75.

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TVA 2005a. Routine Operations and Maintenance of TVA's Control Structures in the Tennessee River Watershed, Biological Assessment, Appendix J: Possible Fish Host of Mussels, July 2005.

TVA 2005b. Tennessee Valley Authority Natural Regional Heritage Project Database. Resource Stewardship, Knoxville, TN.

Baxter, D. S. and D. L. Lowery. 2005. Biological Monitoring of the Tennessee River Near Browns Ferry Nuclear Plant Discharge, 2002. Tennessee Valley Authority, Resource Stewardship, Aquatic Monitoring and Management, Knoxville Tennessee, 27pp.

C. O. Yoder, 2005. ORSANCO Temperature Criteria Re-evaluation, Appendix Table Z.1 database, 2005 Unpublished.

F&WS Question No. 5:

For future in-stream work involving any construction likely to affect listed aquatic species or streams with suitable habitat for listed aquatic species (but no survey data), indicate whether TVA is willing to conference and possibly consult on their effects determinations and conduct needed surveys prior to effects determinations.

TVA RESPONSE:

During the planning of all transmission line construction activities, including new construction and subsequent maintenance operations, TVA attempts to avoid in-stream work. If in-stream work appears unavoidable, TVA assesses the potential for effects on listed species. If there is inadequate existing information to conduct this assessment, TVA will conduct surveys in the project area. If the result of TVA's assessment is the determination that the proposed in-stream work may affect listed species, TVA will consult with the U.S. F&WS. In the past, the need for such consultation has been very rare and TVA does not anticipate it occurring often in the future.

The following briefly summarizes the environmental compliance review process TVA Heritage Resources use for maintenance and modifications of transmission lines and proposed construction of new transmission lines. The review processes are presented below by resource area.

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TVA Heritage Resources Review Process For TVA Transmission Rights-Of-Way Vegetation Maintenance, Line And Pole Maintenance, And New Transmission Line Construction

Overview Of Environmental Compliance Process For Transmission Line Maintenance And Modifications

The TVA PSO organization routinely conducts maintenance activities on transmission lines in the TVA Power Service Area (PSA). These activities include, but are not restricted to, ROW re-clearing (removal of vegetation), pole and crossarm replacements, installation of lightning arrestors and counterpoise, and upgrading of existing equipment. Regular vegetation maintenance activities are conducted on a cycle of 3-5 years. Prior to these maintenance activities, the transmission line area including the ROW is reviewed by technical specialists in the TVA Regional Natural Heritage Project to identify any natural resource issues that may occur along that transmission line. The TVA Regional Natural Heritage Project maintains a database of some 35,000+ (as of November 2005) occurrence records for protected plants, animals, caves, heronries, eagle nests, and natural areas for the entire TVA PSA, including 201 counties in a seven state area. The TVA Heritage database is dynamic, with updates and additions taking place throughout the year. Only credible records are included in the database, and the sources include the results of field surveys by TVA biologists, publications, museum and herbarium specimens, unpublished reports from biologists outside TVA, data exchanges with the seven state heritage programs overlapped by TVA's coverage area (AL, GA, KY, MS, NC, TN, and VA), and data exchanges with five offices of U.S. F&WS (Cookeville, TN, Asheville, NC, Athens, GA, Daphne, AL, and Jackson, MS).

Wetland information is maintained by TVA Heritage Resources and includes National Wetland Inventory wetland maps for the entire TVA PSA. Soil survey maps are also used to identify potential wetland areas. All records of listed plants or animals, caves, wetlands, or natural areas that are present, or are potentially present, in the transmission line ROWs are taken into consideration when conducting these transmission line reviews. Other sources considered in reviews include county lists of federally-protected species, the TVA Natural Heritage database described above, aerial photographs and USGS topographical maps. In addition, high-quality videos taken during low-altitude

flyovers of the transmission corridors are used to estimate the ecological community types present on the ROW. Using these available data sources, Heritage biologists identify sensitive habitats where rare plants or animals are known, or likely to occur.

If potential impacts of maintenance activities to plants or animals on the Endangered Species Act are identified, field surveys may be conducted to document presence of the listed species in the ROW, especially if the proposed actions include pole replacement or some other action that would result in ground disturbance. However, in many other cases where the available data indicate the possibility of listed species being present on the ROW, Heritage specialists assume the species is present and work with PSO staff to avoid impacts to the listed species. For example, if maintenance activities in the ROW could affect a cave inhabited during part of the year by a bat colony, a restriction may be indicated for the time of year the maintenance activities could take place. Within streamside management zones, hand clearing, or backpack herbicide application reduce impacts to streams and listed aquatic species. The width of the streamside management zones vary according to the slope of the surrounding area, the type of stream, and the particular resources that may be present in the stream (listed species). However, if avoidance is not possible, Heritage specialists consult, as appropriate, with the U.S. F&WS.

Also included in this document is the explanation of class definitions and associated table of mapping polygon colors and the restrictions indicated by those designations used in the GIS product transmitted to PSO.

Managed areas (MA), ecologically significant sites, and National Rivers Inventory for maintenance activities in TVA transmission line ROW

MAs are lands held in public ownership that are managed to protect and maintain certain ecological features. Ecologically Significant Sites (ESS) are tracts of privately-owned land that are identified by resource biologists as containing significant environmental resources. National River Inventory (NRI) streams are free-flowing river segments that are recognized by the National Park Service as possessing remarkable natural or cultural values. The TVA Natural Heritage Project maintains a database of all such lands and streams occurring within the seven-state TVA PSA. As described above, this information is added to and updated frequently.

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ROW maintenance activity reviews for MA's, ESS's, and NRI streams are completed by utilizing computerized mapping ArcMap graphics software. If a MA, ESS, and/or NRI stream is located within the 0.5-mile buffer of the subject transmission line, a polygon designating the known or likely extent of that occurrence is drawn on an ArcMap electronic topographic map, and appropriate class restrictions are applied (see table of Class Definitions and Associated Polygon Colors of Sensitive Areas) that represents the area's boundaries within the buffer. A description of the area that includes contact information for the manager of the natural area and also for the appropriate TVA contact, restrictions for maintenance methods, and the subject transmission line name is listed in the corresponding attribute table.

ROW vegetation maintenance and transmission line maintenance are reviewed for potential of these activities to affect natural areas. If all or any portion of a MA, ESS, and/or NRI stream lies within the buffer of the subject transmission line, a polygon is drawn depicting the boundary of such areas. Restrictions on proposed activities (See Attachment 7, Table 1) are determined by the type and location of the MA, ESS, and/or NRI streams, as well as consultation with the area manager or resource specialist. The class and contact restrictions, definitions, and polygon color for both activities are listed in the included table.

After determining the particular class restriction associated with the area, special instructions or comments are added to indicate the importance of the restriction and why it was assigned. For example, when a portion of a national forest is within the 0.5-mile buffer or crossed by the subject transmission line, a Class 3 restriction is assigned and a comment is added indicating the area manager must be contacted and herbicide use is restricted.

Table 2, in Attachment 7, provides the types of restrictions assigned to transmission line maintenance projects for natural areas. Transmission line projects such as lightning mitigation, counterpoise activities, conveyances, line relocations for state highway department work, and providing delivery points and switches for substations are separate projects and are reviewed for potential impacts to MA's, ESS's, and NRI streams based on the amount and type of disturbance required. A three-mile radius of the project site(s) is reviewed for MA's, ESS's, and NRI streams that might be affected by the proposed activity.

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BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2 AND 3 - RESPONSE TO FISH & WILDLIFE SERVICES' (F&WS) REQUEST FOR ADDITIONAL INFORMATION (RAI) ON NRC'S BIOLOGICAL ASSESSMENT OF TVA'S APPLICATION FOR BFN LICENSE RENEWAL

(Botany) - State and federal protect plant restrictions for maintenance activities in TVA transmission line ROW

Botanical assessments are performed for proposed ROW vegetation maintenance and transmission line maintenance activities. During the review, botanists identify state and federally listed plants or rare plant community types that occur, or are likely to occur on or near the transmission line ROW. Identifying the occurrences gives TVA the ability to identify habitats within a proposed project area that are sensitive and potentially require restrictions for particular vegetation management activities. To identify rare plant and sensitive habitat locations, TVA utilizes the U.S. F&WS' county lists of protected plants, the TVA Natural Heritage database, aerial photographs and USGS topographical maps. In addition, TVA also have access to videos taken during low-altitude flyovers of the transmission corridors. These high-quality videos are used to determine the type of plant habitats available on the ROW.

The review process for ROW vegetation maintenance and transmission line maintenance activities is different since they potentially impact vegetation in different ways. ROW vegetation maintenance consists of vegetation clearing with both herbicides (unless otherwise specified) and mechanical methods. Any vegetation present in the ROW that is sprayed by herbicides could be adversely affected. Mechanical clearing has less of an impact since many plants can usually tolerate being cut. Transmission line maintenance projects like pole replacements potentially impact vegetation when vehicles and equipment drive on (and in) the vicinity of the ROW and the soil and the vegetation are disturbed. If sensitive plants are likely, field work is often required to confirm their presence. Frequently however, we assume their presence and make recommendations for different access routes to be taken and TVA notifies appropriate staff about sensitive areas to avoid. Restrictions are determined by knowledge of the habitat requirements for rare plants and rare plant communities that occur within the vicinity of the ROW. Once a sensitive area is located, a polygon designating the known or likely extent of that occurrence is drawn on an ArcMap electronic topographic map, and appropriate class restrictions are applied (see table of Class Definitions and Associated Polygon Colors of Sensitive Areas).

ENCLOSURE

BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2 AND 3 - RESPONSE TO FISH & WILDLIFE SERVICES' (F&WS) REQUEST FOR ADDITIONAL INFORMATION (RAI) ON NRC'S BIOLOGICAL ASSESSMENT OF TVA'S APPLICATION FOR BFN LICENSE RENEWAL

(Terrestrial Animals) - State and federal-protected terrestrial animal restrictions for maintenance activities in TVA transmission line ROW

The TVA Regional Natural Heritage Program keeps track of state and federal-protected species reported from the seven state region. The terrestrial animal portion of the data base includes all listed birds (breeding and large wintering aggregations), mammals, reptiles, and amphibians, and some invertebrates (land snails, insects and cave obligate invertebrates). In addition to certain species of animals, the terrestrial portion of the database also includes records of heronries and caves as they often are used by multiple species, and thus are sensitive habitats.

Each transmission line maintenance project is reviewed for the presence of protected terrestrial animals, heronries, and caves. A database search of the listed animals known from the county (or counties) included in the project area is performed. The zoologists, using these county lists and animal occurrences from the TVA Heritage database, look for habitats appropriate for these species in their review of the ROW videos. Heronries and caves within a 3-mile radius from the ROW restrictions will be listed, as appropriate, for likely occurrences of federal and state listed species. A polygon designating the known or likely extent of that occurrence is drawn on an ArcMap electronic topographic map and appropriate restrictions are applied (Tables 1 and 2). Special comments or instructions accompany each entry, as appropriate. For instance, if a cave located along a power line corridor is scheduled for vegetative maintenance, a 200-foot buffer is indicated around the opening of the cave and a "Hand Clearing Only" restriction is applied within the buffer. If the cave is used by a summer or hibernating colony of bats, appropriate time restrictions, as designated in specific recovery plans for each species, may also be applied.

(Aquatic Animals) - State and federal protected aquatic animal restrictions for maintenance activities in TVA transmission line ROW

Each proposed transmission line maintenance or ROW vegetation maintenance project is reviewed for the known or likely occurrence of protected aquatic animals in streams, in or adjacent to the transmission line ROW, or in a stream drained by the ROW corridor. A database search of the listed aquatic animals known from the county (or counties) included in the

project area is performed. The aquatic biologists, using these county lists and animal occurrences from the TVA Heritage database, look for habitats appropriate for these species in their review of the ROW videos. Once an occurrence or likely occurrence is identified, class restrictions are applied and the appropriate colored polygon is drawn around the resource area on an ArcMap electronic topographic map (Tables 1 and 2). All transmission line maintenance activities are currently conducted using Best Management Practices as outlined in Muncy (1999). Special comments or instructions (including designation of specific Streamside Management Zones, as identified by Muncy 1999) accompany each entry, as appropriate.

(Wetlands) - Wetlands review for maintenance activities in TVA transmission line ROW

Prior to the performance of any maintenance activities in TVA transmission line ROWs, office-level reviews are conducted by Natural Heritage wetland biologists. This review includes review of the National Wetland Inventory (NWI) map, county soil surveys, and TVA photos and videos of transmission line structures and ROW. Potential wetland areas, not indicated on the NWI map, are identified based on interpretation of topographic features, water bodies, soil information, TVA photos and videos and proximity to NWI features. All NWI wetlands or potential wetland areas are superimposed as layers on an ArcMap electronic topographic map (see included maps). These ArcMap images are sent to PSO, and are accompanied by the Excel spread sheet which lists areas that have been included with the NWI data as areas of potential wetlands and what specific guidelines are to be used in each situation to avoid adverse impacts.

The NWI wetlands are indicated on the ArcMap drawings for both the ROW and a 1-mile diameter buffer area around the ROW. Potential wetland areas are identified in the ROW, but are not identified in the buffer area, parts of which may be used for ROW access. If the access route follows an existing road that does not require any repair or upgrading, no further wetland reviews are needed. Repair and upgrading includes, but is not limited to, grading, fill addition, new or upgraded stream crossings, and vegetation removal. If a new or upgraded access route is necessary, environmental reviews of those particular access areas are conducted as required by the National Environmental Policy Act (NEPA).

The NWI data was compiled using high-altitude aerial photography, some of which is now over 15-years old, with very limited field

verification. Because of this, some of the NWI data may be inaccurate. The limitations of the NWI data are considered in the performance of transmission line maintenance and ROW vegetation maintenance projects to avoid accidental wetland impacts. Since there could be wetlands present for which no map evidence or other data currently exists, maintenance crews remain alerted to such things as water on the surface of the ground, soil saturation, the type of vegetation growing in an area, and evidence of present, seasonal or temporary flooding.

In the absence of a ground survey by a wetlands specialist to determine wetland presence and location for ROW vegetation maintenance and transmission line maintenance projects, Best Management Practices, as described in Muncy (1999) are implemented to avoid and minimize potential impacts (see Tables 1 & 2). These techniques would be implemented in all locations where NWI wetlands and potential wetland areas are indicated on the project maps submitted by the TVA Natural Heritage staff.

Site-specific recommendations for ROW vegetation maintenance and transmission line maintenance projects are provided when needed (see Tables 1 & 2). In addition, certain activities that may occur during pole replacement in wetlands are regulated under Sections 404 and 401 of the Clean Water Act. U.S. Army Corps of Engineers (USACE) Nationwide General Permit (NWP) #12 authorizes certain activities related to utility line construction and contains conditions to ensure that impacts to wetlands are minimal. Section 401 gives states the authority to certify whether activities permitted under Section 404 are in accordance with state water quality standards (Strand, 1997). A qualified TVA or TVA contract wetlands specialist would be required to delineate the wetland(s) and provide the wetland determination data forms which are required for inclusion in the permit application. TVA also follows Executive Order 11990 which requires all federal agencies to minimize the destruction, loss, or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands, in carrying out the agency's responsibilities.

Potential impacts to wetlands resulting from ROW vegetation maintenance and transmission line maintenance activities include vegetation damage, soil compaction and erosion, sedimentation, and hydrologic alterations. These impacts are avoided or minimized during TVA maintenance operations by following the recommendations of the guidelines presented above and implementing all relevant Best Management Practices. In

addition, the appropriate permits are obtained if required for the specific activity.

Overview of Environmental Compliance Process for New Transmission Line Construction

Prior to selection of potential routes for new transmission lines, PSO identifies the geographic "study area" that includes all potential routes. Heritage database records of listed plants and animals, caves, natural areas, and NWI wetlands in this study area are provided to PSO at this stage in the planning process. These and other data are used to support development of specific route alternatives for the new line. Procedures for environmental review of proposed alternative routes developed with this preliminary information may include field surveys, depending on resource area (briefly discussed by resource) below. Data obtained from field surveys for new construction projects are used to update the Heritage and wetlands databases so that it is available for future maintenance projects.

If potential construction impacts to plants or animals on the federal Endangered Species Act are identified, Heritage and PSO staffs will make every effort to avoid these impacts. If avoidance is not possible, Heritage specialists consult, as appropriate, with the U.S. F&WS.

(Managed Areas) - Managed Areas, Ecologically Significant Sites, and National Rivers Inventory review of New TVA Transmission Line Construction

A desktop level review of the proposed route alternatives identifies MA, ESS, and/or NRI streams that could be impacted by new transmission line construction. The TVA Natural Areas Coordinator might contact managers of any non-TVA areas that might be affected to confirm boundaries of the area and management objectives. Natural Areas input to the NEPA document prepared for this new construction line project includes the commitment for any mitigation that might be appropriate to protect managed areas from any adverse impacts of construction activities. Field surveys are not usually required, but may be appropriate in some cases.

ENCLOSURE

BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2 AND 3 - RESPONSE TO FISH & WILDLIFE SERVICES' (F&WS) REQUEST FOR ADDITIONAL INFORMATION (RAI) ON NRC'S BIOLOGICAL ASSESSMENT OF TVA'S APPLICATION FOR BFN LICENSE RENEWAL

(Botany) - State and Federal listed plant restrictions for Construction of New TVA Transmission Lines

A desktop-level review of the proposed route alternatives is performed to identify state and federally listed plants known from within the counties included in the construction line route alternatives. If this initial review indicates the project may impact a listed plant, field surveys are made of the proposed routes. The PSO process for line construction normally allows for reroute negotiations to avoid potential impacts to listed plants. These reroutes are worked out in cooperation between Heritage and PSO staffs, and are contingent upon environmental review results for other disciplines. The botanical input to the NEPA document prepared for this new construction line project includes the commitment for any mitigation that might be appropriate to listed plants from any adverse impacts of construction activities, and also make recommendations about ROW maintenance activities specific to maintain populations of listed plants identified.

(Terrestrial Animals) - State and Federal Protected Animal reviews of new TVA Transmission Line construction

A desktop-level review of the proposed route alternatives is performed to identify state and federally listed animals known to occur within the counties included in the construction line route alternatives. If this initial review indicates the project may impact a listed animal, field surveys are made of the proposed routes. The results of these field surveys are conservative, in that confirmation of the species presence is not required for a determination that construction of the new line may affect the species. The presence of appropriate habitat for the listed animals along the proposed route could result in route negotiations and/or specifically recommended mitigation. As mentioned above, the PSO process for line construction normally allows for reroute negotiations to avoid potential impacts to listed animals. These reroutes are worked out in cooperation between Heritage and PSO staffs, and are contingent upon environmental review results for other disciplines. The zoological input to the NEPA document prepared for this new construction line project includes the commitment for any mitigation that might be appropriate to protect listed animals or their habitats from any adverse impacts of construction activities, and also make recommendations about future ROW vegetation and transmission line maintenance activities specific to maintain populations of listed animals identified.

ENCLOSURE

BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2 AND 3 - RESPONSE TO FISH & WILDLIFE SERVICES' (F&WS) REQUEST FOR ADDITIONAL INFORMATION (RAI) ON NRC'S BIOLOGICAL ASSESSMENT OF TVA'S APPLICATION FOR BFN LICENSE RENEWAL

(Aquatic Animals) - State and federal protected animal review of proposed new TVA transmission line construction

A desktop-level review of the proposed route alternatives is performed to identify state and federally listed animals known to occur within the counties and watersheds included in the geographic areas potentially affected by construction line route alternatives. Because topographic maps are not always accurate, and aquatic habitats can be more accurately described by seeing them, field surveys are required for all proposed routes. Field surveys provide information to support recommendations for streamside management zones (Muncy 1999) appropriate for the streams encountered along the route. These field surveys will be conservative, in that biological samples are not normally taken, and confirmation of the species presence is not required for a determination that the construction may affect the species. The presence of appropriate aquatic habitat for the listed animals along the proposed route could result in route negotiations and/or specifically recommended mitigation. As mentioned above, the PSO process for line construction normally allows for reroute negotiations to avoid potential impacts to listed animals. These reroutes are worked out in cooperation between Heritage and PSO staffs, and are contingent upon environmental review results for other disciplines. Streamside management zones for all waterbodies crossed by the proposed routes are flagged in the field and also documented with polygons designating the known or likely extent of that occurrence on an ArcMap electronic topographic map delineated using sub-meter accuracy GPS units. The aquatic animal input to the NEPA document prepared for this new construction line project includes specification of streamside management zones for each stream crossed by the proposed routes, and also includes commitment for any mitigation that might be appropriate to protect listed animals or their habitats from any adverse impacts of construction activities. Recommendations for future ROW vegetation and transmission line maintenance activities that would maintain populations of listed animals are also identified in the NEPA document.

(Wetlands) - Wetlands review of proposed new TVA transmission line construction

A desktop-level review of the proposed route alternatives is performed to identify areas where NWI, soil survey maps and data indicate wetlands present in the geographic areas potentially affected by construction line route alternatives. Field surveys for wetlands are required for all proposed routes. Any wetlands

encountered are delineated with standard wetlands delineation techniques, and the ecological condition is also evaluated using a TVA-developed wetland rapid assessment protocol. Wetlands crossed by the proposed routes are flagged in the field, and also mapped using sub-meter accuracy GPS units. The presence of wetlands along the proposed route could result in route negotiations and/or specifically recommended mitigation. As mentioned above, the PSO process for line construction normally allows for reroute negotiations to avoid potential impacts to wetlands. These reroutes are worked out in cooperation between Heritage and PSO staffs, and are contingent upon environmental review results for other disciplines and the practicability of the suggested reroutes. The wetlands input to the NEPA document prepared for this new construction line project includes documentation (size and type of wetland, for example) for each wetland crossed by the proposed routes, and also includes commitment for any mitigation that might be appropriate to protect these wetlands from adverse impacts of construction activities. Recommendations for future ROW vegetation and transmission line maintenance activities are also identified in the NEPA document.

Literature Cited

Muncy, J.A. 1999. A guide for environmental protection and best management practices for Tennessee Valley Authority transmission construction and maintenance activities (revised). Technical note TVA/LR/NRM 92/1. TVA, Norris, TN. (Chris Austin, Chris Brewster, Alicia Lewis, Kenton Smithson, Tina Broyles, Tom Wojtalik, editors).

Strand, M.N. 1997. *Wetland Deskbook*, 2nd edition. The Environmental Law Reporter, Environmental Law Institute, Washington, D.C.

ENCLOSURE

BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2 AND 3 - RESPONSE TO FISH & WILDLIFE SERVICES' (F&WS) REQUEST FOR ADDITIONAL INFORMATION (RAI) ON NRC'S BIOLOGICAL ASSESSMENT OF TVA'S APPLICATION FOR BFN LICENSE RENEWAL

F&WS Question No.6:

Indicate whether TVA is willing to select and use only low-toxicity surfactants and other adjuvants during herbicide treatments within stream buffer zones to protect listed aquatic species known or suspected of being present in the streams. [This may require addition of a BMP to existing plans.] Surfactants should have LC50's of not less than 20 mg/L for daphnia, trout and [if data are available] mollusks.

TVA RESPONSE:

TVA's vegetation maintenance activities involving herbicide and adjuvant application are subject to environmental review procedures previously described in the response to Question #1. Typically, limited maintenance activities are allowed within the Streamside Management Zones (SMZs). Levels of protection for SMZs are identified in the environmental review based upon type of watercourse, primary use of water resource, topography, and identification and habitat suitability of threatened and endangered species. TVA guidelines outlined in "A Guide for Environmental Protection and Best Management Practices for TVA Transmission Construction and Maintenance Activities" provide directions necessary to protect the stream channel or other water body and water quality, and alleviate any potential adverse impacts on threatened and endangered species.

TVA currently utilizes Activate Plus, as manufactured by Terra, as an adjuvant to herbicide to improve the performance of the spray mixture. While the LC_{50} toxicity of this particular surfactant is less than 20 mg/L and lower than recommended by U.S. F&WS, the surfactant contains isopropyl alcohol, which limits its propensity to migrate to water and thus, without direct application to water, limits any probable risks of toxic doses. Additionally, because of the lack of published field data, it is difficult to determine true toxicity effects of surfactants on aquatic species. However, TVA would agree to a trial period usage of side-by-side test plots over the next two years of low toxicity surfactants in the SMZs of area transmission lines. Low toxicity surfactants could include LI700 as manufactured by Loveland Industries, Agri-Dex, as manufactured by Helena Chemicals, and Class Act Next Generation, as manufactured by Agrisolutions. These particular products currently have some toxicity data available that demonstrate a toxicity range of greater than 20 mg/L. A trial period usage

would allow TVA to determine efficacy of these particular surfactants in combination with currently used herbicides. TVA could also adjust their evaluated surfactant use and respond as new products enter the market or LC_{50} toxicity data becomes available. Some surfactants may work best with certain types of herbicides and not others due to their solubilities. Differences in the herbicide's oil or water solubility influence absorption. Additionally, surfactants perform differently based on the type of plant to be controlled due to differences in wax content and composition, leaf arrangement and architecture, and plant hairs. TVA plans to engage expert assistance to evaluate the effectiveness of the spray mixtures for optimal vegetation control on the associated ROW SMZs. Based on the surfactant evaluation, TVA would consider utilizing these products on an extended schedule in the BFNP SMZs, as well as wider scale use across the TVA region.

ENCLOSURE

BROWNS FERRY NUCLEAR PLANT (BFN) UNITS 1, 2 AND 3 - RESPONSE TO FISH & WILDLIFE SERVICES' (F&WS) REQUEST FOR ADDITIONAL INFORMATION (RAI) ON NRC'S BIOLOGICAL ASSESSMENT OF TVA'S APPLICATION FOR BFN LICENSE RENEWAL

Conclusion:

TVA has provided responses to the six F&WS requests for additional information provided to TVA on August 12, 2005, regarding BFN license renewal environmental issues. Based on the actions taken by TVA in response to these requests in concert with the discussions that took place between TVA and F&WS personnel on October 27, 2005, in Birmingham, Alabama, TVA believes that all issues have been resolved in support of TVA's BFN License Renewal Application.

ATTACHMENT 1

Listing of TVA & Contract Biologist

Working on Transmission Line Projects

ATTACHMENT 1 [Continued]

Listing of TVA & Contract Biologist
Working on Transmission Line Projects

Heritage Staff Qualifications Summary (including contractors)

Name: John T. (Bo) Baxter, Jr.

Education: B.S. in Zoology; M.S. in Zoology

Area of expertise: Fish and benthic macroinvertebrate taxonomy, threatened and endangered aquatic animals - conservation and reintroduction efforts, NEPA reviews/endangered species consultation

Years of professional experience: 15

TVA Position: Senior Aquatic Endangered Species Biologist

Contact information: (865) 632-3360; jtbaxter@tva.gov

Years of TVA experience: 5

Professional licenses or memberships: Association of Southeastern Biologists, American Society of Ichthyologists and Herpetologists, North American Benthological Society

Other information: Board member Clinch River Environmental Studies Organization (CRESO). Peer reviewed taxonomic publications.

Name: Stephanie A. Chance

Education: B.S. in Fisheries Biology; M.S. in Environmental Biology

Area of Expertise: Malacology, endangered species consultations

Years of Professional Experience: 5

TVA Position: Aquatic Endangered Species Biologist

Contact information: (865) 632-3403; sachance@tva.gov

Years of Experience with TVA: 2

Professional licenses or memberships: Freshwater Mollusk Conservation Society

Other information: Peer-reviewed publications in scientific journals

ATTACHMENT 1 [Continued]

Listing of TVA & Contract Biologist Working on Transmission Line Projects

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Name: Joseph "Leo" Collins

Education: B.S. in Biology; Ph.D in Plant Taxonomy

Area of expertise: Plant taxonomy, threatened & endangered plants, uncommon plant communities of southeastern U.S., NEPA reviews

Years of professional experience: 30

TVA Position: Botany Specialist

Contact information: (865) 632-3416; jlcollins@tva.gov

Years of TVA experience: 27

Professional licenses or memberships: Tennessee Academy of Science, Southern Appalachian Botanical Society

Other information: Nine years owning & operating a wholesale nursery; 20 years owning & operating a Christmas tree farm; botanical field experience in Peru, Panama, and Costa Rica; ten years publishing a newsletter on landscaping with native plants; prepared scientific description of a new species of clover; peer-reviewed publications and several articles in conservation or nursery magazines.

Name: Patricia B. Cox

Education: B.S. & M.S. in Biology; Ph.D Botany

Area of expertise: Plant taxonomy & systematics; plant anatomy

Years of professional experience: 30

TVA Position: Senior Botanist

Contact information: (865) 632-3609; pbcox@tva.gov

Years of TVA experience: 1

Professional licenses or memberships: Southern Appalachian Botanical Society, Membership secretary, Representative to the Smoky Mountain Wildflower Pilgrimage, chairman of the Bartholomew Award committee; Association of Southeastern Biologists, Co-meeting chair for ASB 2006, Meritorious teaching award committee; Discover Life in America, Board of directors; American Fern Society; Great Smoky Mountain Wildflower Pilgrimage organizer.

Other information: Currently working on an All Taxa Biodiversity project in the Great Smoky Mountains National Park. Project involves using the trails as transects to map the fern species present in the park. Over the past four summers, with the help of volunteers, over 165 miles of 47 trails have been mapped. Peer-reviewed taxonomic publications.

ATTACHMENT 1 [Continued]

Listing of TVA & Contract Biologist Working on Transmission Line Projects

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Name: Travis Hill Henry

Education: B.S. in Wildlife Science, M.S. in Zoology

Area of expertise: Mammalogy, endangered species, cave biology, habitat analysis

Years of professional experience: 13

TVA Position: Terrestrial Zoology Specialist

Contact information: (865) 632-6360; thhenry@tva.gov

Years of TVA experience: 9

Professional licenses or memberships: The Wildlife Society, Society of Mammalogists

Other information: Board member, Tennessee Bat Working Group; Several peer-reviewed journal articles and accounts in a publication on imperiled wildlife in Alabama

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Name: Jason M. Mitchell

Education: B.S. in Wildlife & Fisheries Science; M.P.A. in Environmental Policy

Area of expertise: Natural resource management, emphasis on sensitive resources or ornithology

Years of professional experience: 11

TVA Job title: Senior Natural Areas Biologist

Years of TVA experience: 5

Professional licenses or memberships: Natural Areas Association, Association of Field Ornithologists

Other information: Work history in resource management has emphasized project management, research & monitoring, technical writing, public relations, and strategic planning; peer-reviewed & popular journal articles & technical reports

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Name: Kim Pilarski

Education: B.S. & M.S. in Geography, minor in Ecology

Area of expertise: Wetland assessment & regulation; watershed assessment

Years of professional experience: 11

TVA Position: Senior Wetlands Biologist

Contact information: (865) 632-3405; kpilarski@tva.gov

Years of TVA experience: 11

Professional licenses or memberships: Society of Wetland Scientists

ATTACHMENT 1 [Continued]

Listing of TVA & Contract Biologist Working on Transmission Line Projects

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Name: Scott, Edwin, M., Jr.

Education: B.S. in Zoology; M.S. in Fisheries Biology

Area of expertise: Aquatic ecology, ichthyology

Years of professional experience: 29

TVA Position: Aquatic Zoologist

Contact information: (865) 632-3358; emscott@tva.gov

Years of TVA experience: 29

Professional licenses or memberships: America Fisheries Society (President of Tennessee Chapter); Southern Division AFS Warmwater Streams committee

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Name: K. Brandon Chance

Educations: B.A. Biology; M.S. Environmental Biology

Areas of Expertise: Aquatic and Fisheries Biology and Herpetology

Years of Professional Experience: Five

TVA Position: Staff Augmentation Aquatic Ecology Contractor

Contact information: (865) 632-2414; kbchance@tva.gov

Experience with TVA: 2 years

Name: Edward E.C. Clebsch

Education: A.B., M.S., & Ph.D. in Botany

Area of expertise: Botany

Years of professional experience: 55

TVA Position: Staff augmentation contract Botany Specialist

Contact information: (865) 632-3310; eeclebsch@tva.gov

Years of TVA experience: 4

Professional licenses or memberships: Association of Southeastern Biologists, Southern Appalachian Botanical Society, American Arachnology Society, International Society of Arachnology, Ecological Society of America

Other information: Staff augmentation contractor; Co-owner Native Gardens, a native plant nursery; Proprietor, Clebsh Ecology Consulting; interest and expertise of Pseudoscorpions; Many peer-reviewed journal articles

ATTACHMENT 1 [Continued]

Listing of TVA & Contract Biologist Working on Transmission Line Projects

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Name: Kelly Baxter

Education: B.S. in Botany, M.S. in Plant Science & Landscape Systems

Area of expertise: Plant taxonomy & ecology, botanical environmental reviews & NEPA compliance

Years of professional experience: 3

TVA Position: Staff augmentation contract Botany Scientist

Years of TVA experience: 2

Other information: Staff augmentation contractor; experience managing a garden center – knowledgeable of cultivated plants

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Name: Paul C. Durr

Education: M.S. in Botany

Area of expertise: Wetland Science, Botany, Plant Ecology

Years of professional experience: 25

TVA Position: Task Contract Botany & Wetlands Senior Scientist

Contact information: (865) 9226-3608; ptrles@aol.com

Years of TVA experience: 2

Professional licenses or memberships: Society of Wetland Scientists, Southern Appalachian Botanical Society

Other information: Employed by PTRL Environmental Services

Name: Larry D. Estes (Dwayne)

Education: B.S. in Plant Biology; currently, in the Ph.D program in Plant Systematics

Area of Expertise: Vascular Flora of Tennessee, particularly Middle Tennessee; Floristics of limestone cedar glades; phytogeographic patterns of southeastern flora of TN, AL, KY.

Years of Professional Experience: 4 years of professional experience as a botanical consultant

TVA Position: Staff augmentation Senior Botany contractor

Contact information: (865) 974-2256; tnplants@yahoo.com

Years of TVA experience: 2.5 years

ATTACHMENT 1 [Continued]

Listing of TVA & Contract Biologist Working on Transmission Line Projects

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Name: Jenny Fiedler

Education: B.S. in Biology, M.S. in Wildlife Science

Area of expertise: Bats & birds, wind turbine mortality of birds & bats

Years of professional experience: 5

TVA Job title: Staff Augmentation Senior Terrestrial Zoologist contractor

Years of TVA experience: 4

Professional licenses or memberships: The Wildlife Society

Other information: Extensive mist-netting experience (birds & bats), have taught bird monitoring & mist-netting skills to biologists in Mexico & Cuba, and continue to teach preparation of bird study-skins to students at the University of Tennessee

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Name: James P. Groton

Education: M.S. in Forestry; B.S. in Natural Resources

Area of Expertise: Wetlands Science, Geographic Information Systems and Analysis

Years of Professional Experience: 26

TVA Position: Task Senior Wetlands Contractor

Contact information: (865) 632-3148; jpgroton@tva.gov

Years of Experience with TVA: 3

Professional licenses or memberships: Professional Wetland Scientist (PWS 558), Society of Wetlands Science, Association of State Wetland Managers, Soil and Water Conservation Society

Other information: Employed by Science Applications Information Consultants. Conducts wetland delineations and assessment for TVA projects; conduct Sensitive Areas Reviews for TPS transmission line maintenance, reclearing, pole replacement, and lightning mitigation; provide input on Categorical Exclusion Checklists, Environmental Assessments, and Environmental Impact Statements; assisted with development of TVA wetland mitigation policy and TVA Rapid Assessment Method for evaluating wetland integrity.

ATTACHMENT 1 [Continued]

Listing of TVA & Contract Biologist Working on Transmission Line Projects

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Name: Heather M. Hart

Education: B.S. in Plant & Soil Science; M.S. Environmental Science & Soils (graduation May 2005)

Area of expertise: Interpreting the morphology & classification of soils and soil & water conservation

Years of professional experience: 3

TVA Position: Staff augmentation Natural Areas biologist contractor

Contact information: (865) 632-6417; hmhart@tva.gov

Years of TVA experience: 2

Professional licenses or memberships: TDEC Fundamentals of Sedimentation & Erosion Control Certification; Associate Professional Soil Scientist American Society of Agronomy SSA/CPSC; USDA Regulatory Authority Application of Restricted Use Herbicides; member of Soil Science Society of America

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Name: David T. Nestor

Education: B.S. in Aquaculture, minor in Bioscience; M.S. in Botany

Area of expertise: Botany

Years of professional experience: 1

TVA Position: Staff augmentation Botany Scientist contractor

Contact information: (865) 632-4209; dtnestor@tva.gov

Years of TVA experience: 1

Other information: Little River Association volunteer, Great Smoky Mountains National Park ATBI volunteer, plant nursery experience – perennial maintenance & propagation, musician

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Name: Larry R. Pounds

Education: M.A. & B.A. in Mathematics; Ph.D. in Ecology

Area of Expertise: Endangered plants, plant communities, exotic pest plants

Years of Professional Experience: 20

TVA Position: Staff augmentation Botany Specialist contractor

Contact information: (865) 632-3302; lrpounds5@tva.gov

Years of Experience with TVA: 8

Professional licenses or memberships: Ecological Society of America, Natural Areas Association, Southern Appalachian Botanical Society.

Other information: Peer-reviewed publications in scientific journals

ATTACHMENT 1 [Continued]

Listing of TVA & Contract Biologist Working on Transmission Line Projects

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Name: Jan Thomas

Education: B.S. in Home Economics Education; M.S. in Human Ecology

Area of expertise: Natural Areas

Years of professional experience: 10

TVA Position: Staff augmentation Natural Area Scientist contractor

Contact information: (865) 632-6204; jkthomas@tva.gov

Years of TVA experience: 2

Other information: Several years experience in health & safety research, environmental restoration, technical writing, adult education/human services

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Name: Allan J. Trently

Education: B.S. in Environmental Resource Management; M.S. in Biology

Area of expertise: Ornithology

Years of professional experience: 11

TVA Position: Staff augmentation Terrestrial Zoologist contractor

Contact information: (865) 632-6356; ajtrently@tva.gov

Years of TVA experience: 5

Professional licenses or memberships: Tennessee Ornithological Society

Other information: Several publications in bird watching and conservation journal

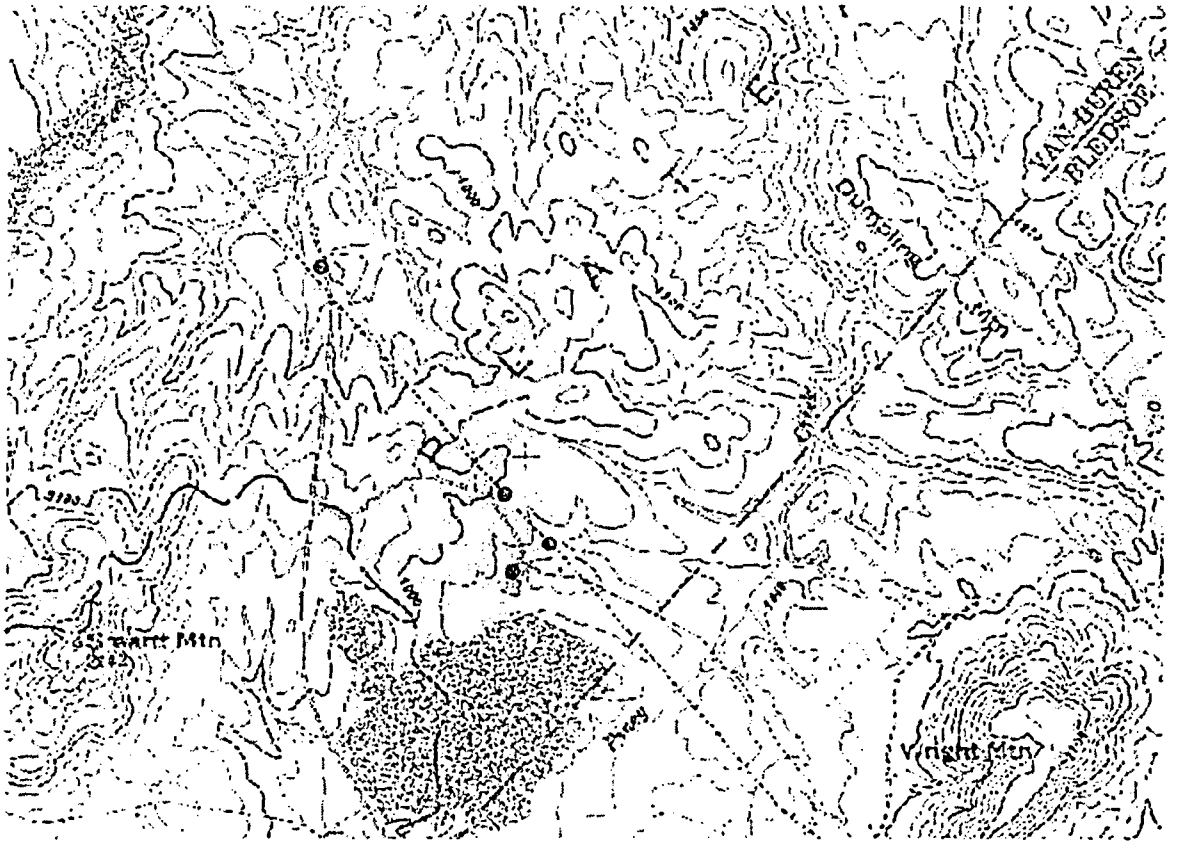
ATTACHMENT 1 [Continued]

Listing of TVA & Contract Biologist Working on Transmission Line Projects

Examples of Project Impact Reviews involving Field Surveys

A. Monkey-face orchid in the ROW for the Great Falls - Pikeville Transmission Line Demolition; Van Buren and Bledsoe Counties, TN

ARC-Map database records for the subject proposed transmission line project area were reviewed. Reproduced below is a section of the map showing green dots, which represent individual records of listed plants. When the TVA Heritage Project staff reviewer clicks on a green dot, it brings up the data for that record, including the name of the species, where it was collected, when it was first and last observed and by whom (including whether or not there is sufficient information to indicate the species is still present), and directions to get there. Each record has a reference (e.g., publication, letter, map sent by a botanist, herbarium specimen, etc.). On many records the database entry also states how many individuals were present at each observation. An example of the information that appears when a green dot is clicked is also reproduced below. ARC-Map also contains a ruler tool which can be used to measure the distance between the occurrence record and the project.



ATTACHMENT 1 [Continued]

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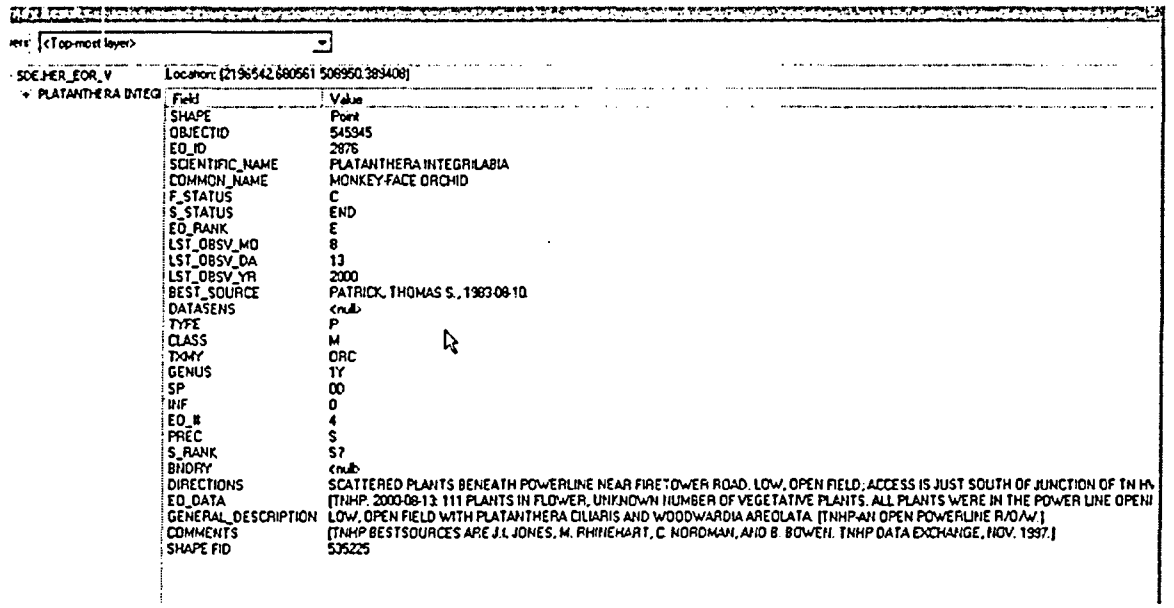

SDE.HER_EOR_V Location: (2196542.680561 506950.389408)

PLATANTHERA INTEGI

Field	Value
SHAPE	Point
OBJECTID	545945
EO_ID	2976
SCIENTIFIC_NAME	PLATANTHERA INTEGRILABIA
COMMON_NAME	MONKEY-FACE ORCHID
F_STATUS	C
S_STATUS	END
EO_RANK	E
LST_OBSV_MO	8
LST_OBSV_DA	13
LST_OBSV_YR	2000
BEST_SOURCE	PATRICK, THOMAS S., 1983-08-10
DATASENS	<null>
TYPE	P
CLASS	M
TXNY	ORC
GENUS	TY
SP	00
INF	0
EO_#	4
PREC	S
S_RANK	S?
BNDRY	<null>
DIRECTIONS	SCATTERED PLANTS BENEATH POWERLINE NEAR FIRETOWER ROAD. LOW, OPEN FIELD; ACCESS IS JUST SOUTH OF JUNCTION OF TN HW
EO_DATA	(TNHP. 2000-08-13: 111 PLANTS IN FLOWER, UNKNOWN NUMBER OF VEGETATIVE PLANTS. ALL PLANTS WERE IN THE POWER LINE OPENI
GENERAL_DESCRIPTION	LOW, OPEN FIELD WITH PLATANTHERA CILIARIS AND WOODWARDIA AREOLATA. [TNHP-AN OPEN POWERLINE R/OAW.]
COMMENTS	[TNHP BESTSOURCES ARE J.L. JONES, M. RHINEHART, C. NORDMAN, AND B. BOWEN. TNHP DATA EXCHANGE, NOV. 1997.]
SHAPE.FID	535225

As stated above, the Heritage staff has specific guidelines for interpretation of the Arc-Map data when project reviews are performed. For example, if the Heritage database contains a plant record within 5 miles of the proposed project (in this case, within 5 miles of the ROW corridor), botanical personnel consider it possible for that species to currently inhabit the project area. Other disciplines have different requirements; for example, the search radius for aquatic animals is 10 miles.

Also as described above, Transmission & Power Supply video flyovers are used to determine whether or not the habitat might be present for a given plant along the subject stretch of ROW. For example, a 5-mile search might pull up many possible plants from a reach of ROW, but if the video flyover shows row crops, the row crop area would probably not be marked for special ROW management techniques based on the rare plant record. However, if the video flyovers show anything similar to appropriate habitat, to be conservative the entire possible habitat area is marked with a polygon on the file that is sent to TPS, along with special instructions designed to protect the plant (for example, don't use chemicals; bush-hog instead).

Because of the record of the federally-listed Monkey-Face Orchid, Patricia Cox and Kelly Baxter visited the site before the plants were in flower. After being contacted by the State of Tennessee Heritage staff regarding the presence of the orchids in the ROW, Patricia Cox and Paul Durr revisited the area and found plants occurring in the ROW and growing in the nearby woods. Notes taken from the subsequent field visit are reproduced below:

Field Notes for Great Falls - Pikeville Transmission Line Demolition Project, 23 August 2004

1. UTM: 16S 0642661/3939236
At the junction of the de-energized line and the "new" line there were **eight** flowering and many sterile plants of *Platanthera integrilabia* (federal candidate) as well as *P. ciliaris* growing in the ROW between the junction and structure 56. *Platanthera integrilabia* , *Cyperpedium acaule*, and *Parnassia asarifolia* were growing at the edge of the woods near a fire line.

2. UTM: 16S 0642699/3939336
On the De-energized line...between structures 517 and 518 (closer to 517)...There were **SIX** *Platanthera integrilabia* plants flowering and many more sterile plants were found in the right of way (very grown up with red maple). These plants were marked with yellow tape.

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3. UTM: 16S 0642689/3939302
Eighteen Flowering and many sterile plants were found in sphagnum at the edge of the woods adjacent to structure 517. The plants were within 100 yards of the structure. The taxa associated with *P. integrilabia* were: *Acer rubrum, Viburnum nudum, Alnus serrulata, Itea virginica, Osmunda cinnamomea, Osmunda regalis, Oxypolis rigidor, Cinna arundinacea,* and *Dicanthelium acuminatum.* Area was flagged with yellow tape.

4. UTM: 16S 0643007/3938942
Between structures 514 and 515 on the de-energized line, **TWO** flowering and many sterile plants of *P. integrilabia* were found growing at the edge of the woods in sphagnum. They were growing in a large population of New York fern, *Thelypteris novaboracensis.* The *Parnassia* was also seen at this site. Plants were flagged with yellow tape.

Platanthera ciliaris and *Bartonia virginica* were found in abundance along this stretch of ROW between structures 514-515.

5. On the left side of the ROW, adjacent to the woods between the road and Structure 516 was one small tree of *Populus grandidentata* , a species of SPCO in TN.

B. Bald Eagle Nesting Sites in Proposed Transmission Line Corridors for Clay and Lowndes Counties, Mississippi

In February 2005, a transmission line for the potential development of the Golden Triangle Industrial Park was proposed through Clay and Lowndes Counties, Mississippi.

The proposed transmission line routes were drawn into ArcMap (shown in yellow, orange, and red) and a 3-mile buffer was added around the proposed routes (shown in purple). The Heritage database layer showed two terrestrial animal records (Black-knobbed Map Turtle and a Heronry) that fell within 3-miles of the proposed routes. Based on the proposed actions and the distances from those actions, there was no concern for either the turtle or the heronry. A Bald Eagle nest location was additionally noted 3.5 miles from the closest proposed route – the distance of this nest from the proposed actions was also judged to be sufficient (based on U.S. Fish & Wildlife Service guidelines) for the construction activity not to affect any birds that may be present.

ATTACHMENT 1 [Continued]

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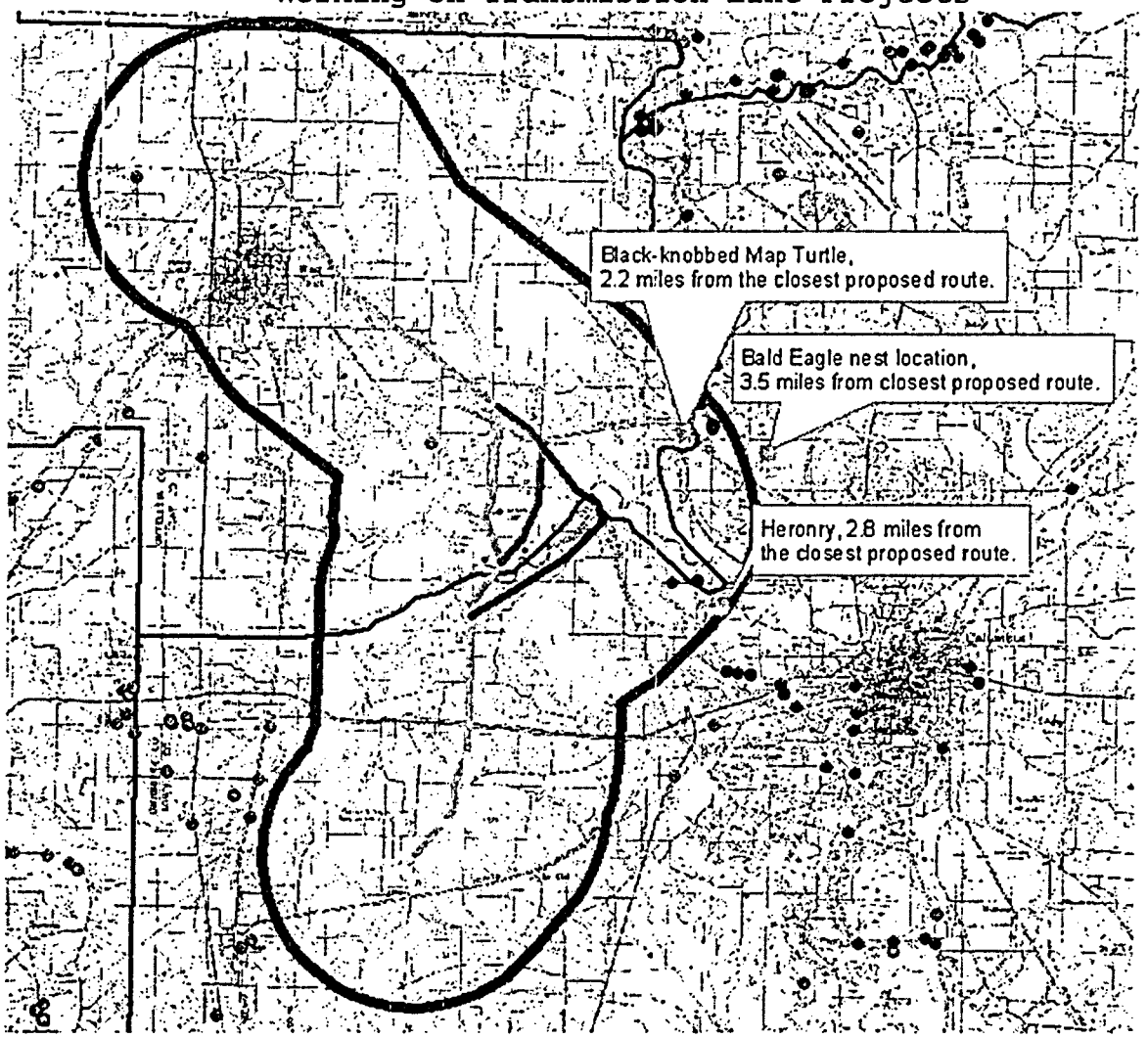
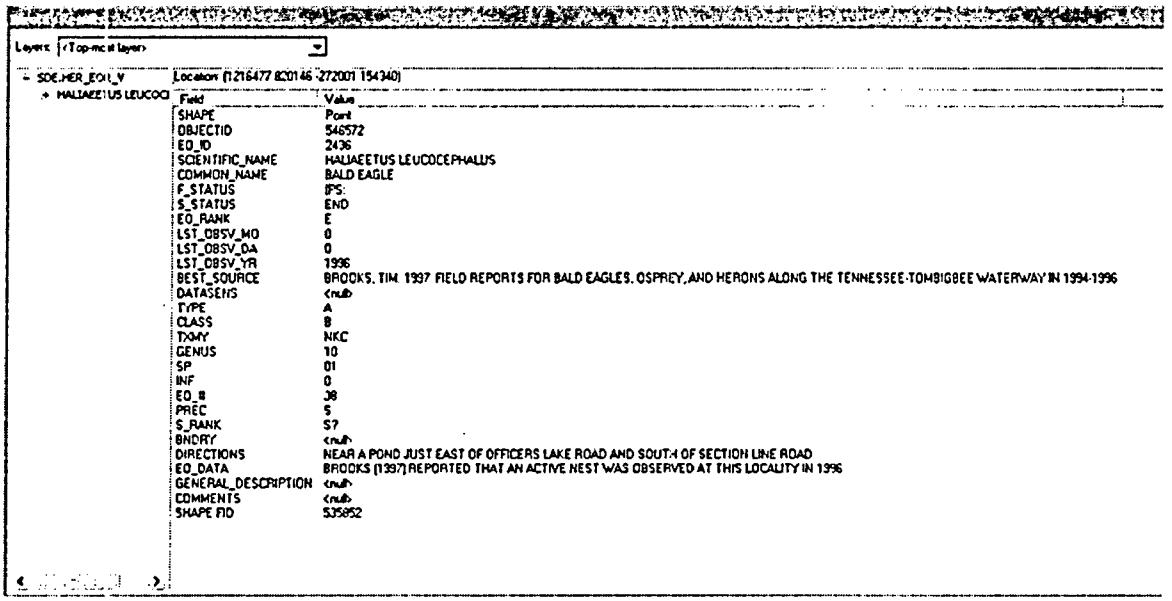


The information associated with the Bald Eagle record is shown below.

ATTACHMENT 1 [Continued]

Listing of TVA & Contract Biologist
Working on Transmission Line Projects



Subsequently, however, a letter of concern from owners of the Young farm indicated probable locations of several additional Bald Eagle nests.

A field visit by Hill Henry (Terrestrial Zoology Specialist for TVA Heritage) on February 16, 2005 confirmed two new locations of bald eagle nests. An adult bird was seen on the southern nest, while only a nest structure was found at the northern location. However, the landowners said they had seen adult birds using the northern nest recently. These two nest locations were plotted on the map, and using the buffer tools in ArcMap, buffers 0.5 mile (blue) and 1 mile (purple) in radius were created around the bald eagle locations of concern. We were than able to see where they occurred in relation to the different routes that were being proposed.

ATTACHMENT 1 [Continued]

Listing of TVA & Contract Biologist
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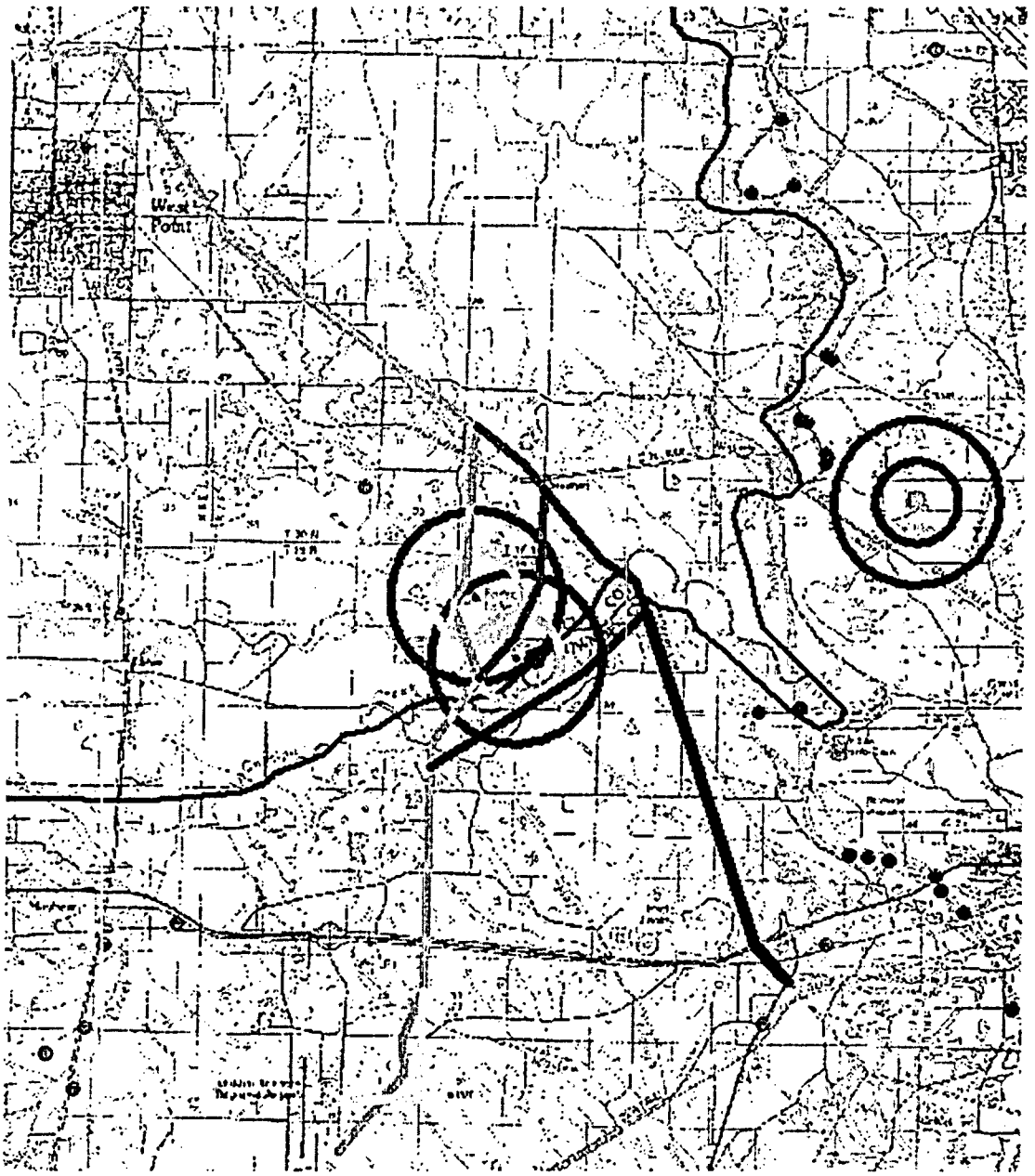

Initially, the right-of-ways of the first three alternative routes crossed the 0.5 mile buffer zone of at least one of the bald eagle nest locations. After a project meeting in Chattanooga, TN on February 28, 2005 a different route was chosen, (in black), that avoided all the bald eagle nest locations by at least 1 mile.

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C. Colbert Fossil Plant Mooring Cell Replacement, Colbert County, AL

In May 2005, a walkway and mooring cell at Colbert Fossil Plant were damaged by a barge. The Colbert Barge Unloading Facility is located in Wilson Tailwater/Pickwick Reservoir, where several state and federally-listed mussel species are known to occur. Using ARC-Map (pictured below), a ten mile buffer was drawn around the plant to determine what state and/or federally listed aquatic animal species were present. This resulted in a table including one crayfish, one shrimp, five fish, seven snails, and 44 mussels (ATTACHMENT 2). However, TVA biologists determined that several of these species would not be affected because they are found in caves or tributaries to the Tennessee River and not the river itself. The only species possibly affected by repairing the barge unloading facility would be the mussel and snail species, which could exist within the footprint of the damaged mooring cell. After informal consultation with the Daphne, Alabama office of the USFWS, it was decided that a mussel survey would be conducted to determine whether or not these listed species were present within the project area. The mollusk specialist in the Alabama Department of Conservation and Natural Resources, Division of Wildlife and Freshwater Fisheries (W&FF) was consulted to suggest the best person to conduct the mussel survey. A TVA aquatic biologist and U.S. Fish & Wildlife Service (F&WS) and W&FF personnel were on call during a weekend to hear whether or not there were endangered species in the area to remove. If listed species were present, they were to be relocated out of the project area to an area specified by FWS. However, the mussel survey performed by Paul Yokley, malacologist, Yokley Environmental Consulting Service, revealed that no state or federally-listed mussels were present within the barge unloading facility. Based on those findings we were able to say this project would have no effect on listed mussel or snail species and the mooring cell was repaired.

ATTACHMENT 1 [Continued]

Listing of TVA & Contract Biologist
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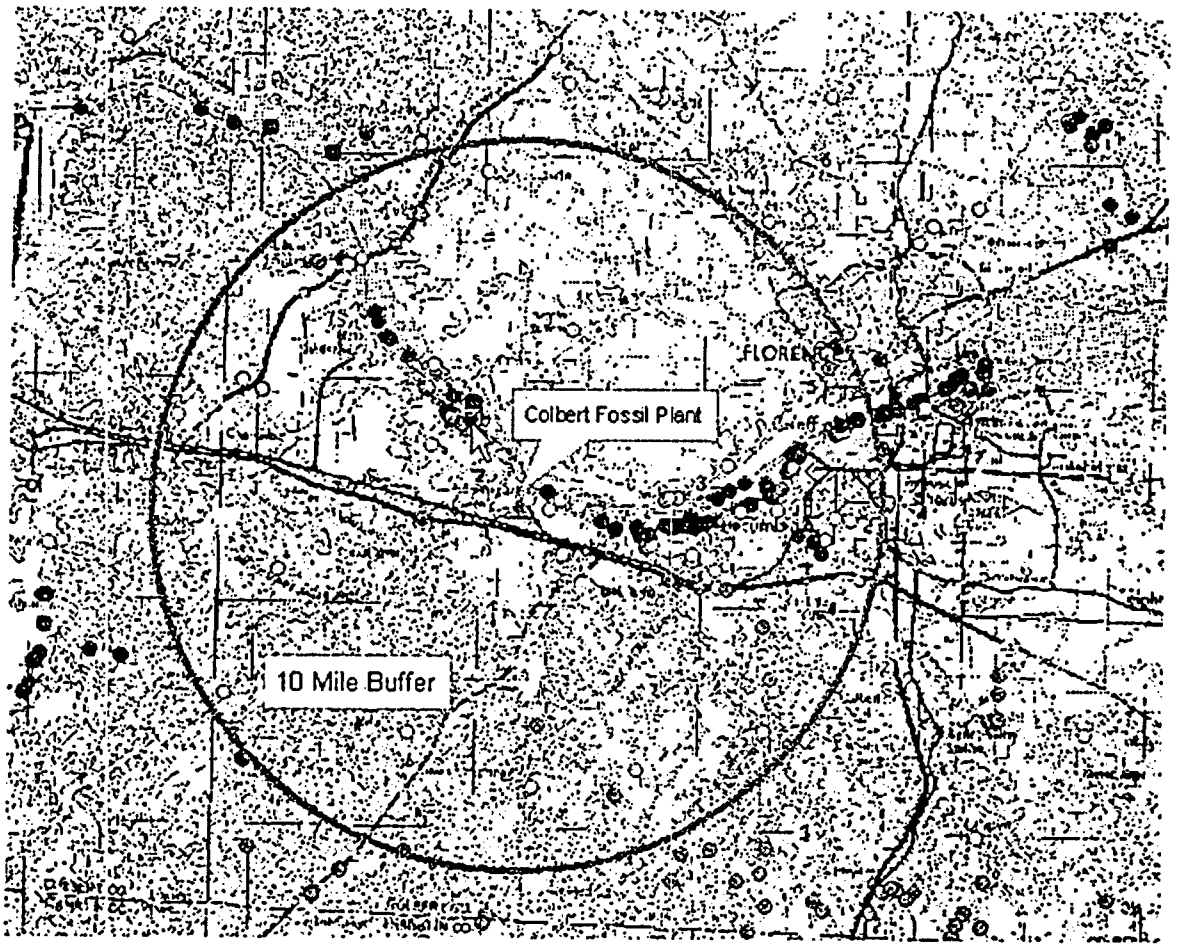


ATTACHMENT 2

Colbert Steam Plant

Species Listing

Scientific Name	Common Name	Status		EO Rank	Last Observed			State Rank
		Federal	State		M	D	Y	
Crustraceans								
Cambarus jonesi	A Troglobitic Crayfish		NOST	E				S?
Cambarus jonesi	A Troglobitic Crayfish		NOST	E	1	26	1976	S?
Palaemonias alabamae	Alabama Blind Cave Shrimp	END	PROT	E	2	23	2000	S?
Palaemonias alabamae	Alabama Blind Cave Shrimp	END	PROT	E	2	23	2000	S?
Procambarus pecki	A Troglobitic Crayfish		NOST	E	1	21	1977	S?
Procambarus pecki	A Troglobitic Crayfish		NOST	E	1	26	1976	S?
Fish								
Cyprinella monocha	Spotfin Chub	THR	PROT	X	10	27	1937	S?
Elassoma alabamae	Spring Pygmy Sunfish		PROT	X	11	5	1937	S?

Etheostoma tuscumbia	Tuscumbia Darter		PROT	E	3	16	1995	S?
Etheostoma tuscumbia	Tuscumbia Darter		PROT	X	11	5	1937	S?
Speoplatyrhinus poulsoni	Alabama cavefish	END	PROT	E	4	10	1996	S?
Typhlichthys subterraneus	Southern Cavefish		PROT	E	10	6	1999	S?
Typhlichthys subterraneus	Southern Cavefish		PROT	E	1		1996	S?
Typhlichthys subterraneus	Southern Cavefish		PROT	E	2	23	2000	S?
Typhlichthys subterraneus	Southern Cavefish		PROT	H	1	21	1977	S?
Mussels								
Actinonaias ligamentina	Mucket		NOST	H	12	21	1937	S?
Actinonaias ligamentina	Mucket		NOST	H	12	21	1937	S?
Cumberlandia monodonta	Spetaclecase	C	PROT	E	8	11	2000	S?

Cumberlandia monodonta	Spetaclecase	C	PROT	E	8	15	2000	S?
Cumberlandia monodonta	Spetaclecase	C	PROT	E	8	16	2000	S?
Cumberlandia monodonta	Spetaclecase	C	PROT	E			1965	S?
Cyprogenia stegaria	Fanshell	END	PROT	E	8	15	2000	S?
Cyprogenia stegaria	Fanshell	END	PROT	E			2001	S?
Cyprogenia stegaria	Fanshell	END	PROT	H	12	21	1937	S?
Cyprogenia stegaria	Fanshell	END	PROT	H	8	20	2003	S?
Cyprogenia stegaria	Fanshell	END	PROT	H	12	21	1937	S?
Dromus dromas	Dromedary Pearlymussel	END	PROT	H	12	21	1937	S?
Dromus dromas	Dromedary Pearlymussel	END	PROT	H	12	21	1937	S?
Dromus dromas	Dromedary Pearlymussel	END	PROT	X	8	15	2000	S?
Elliptio dilatata	Spike		NOST	H	12	21	1937	S?
Elliptio dilatata	Spike		NOST	H	12	21	1937	S?

Epioblasma arcaeformis	Sugarspoon		EXT	H	12	21	1937	S?
Epioblasma arcaeformis	Sugarspoon		EXT	H	12	21	1937	S?
Epioblasma biemarginata	Angled Riffleshell		EXT	H	12	21	1937	S?
Epioblasma biemarginata	Angled Riffleshell		EXT	H	12	21	1937	S?
Epioblasma brevidens	Cumberland Combshell	END	PROT	H	12	21	1937	S?
Epioblasma brevidens	Cumberland Combshell	END	PROT	H	12	21	1937	S?
Epioblasma capsaeformis	Oyster Mussel	END	PROT	H	12	21	1937	S?
Epioblasma capsaeformis	Oyster Mussel	END	PROT	H	12	21	1937	S?
Epioblasma Flexuosa	Leafshell		EXT	H	12	21	1937	S?
Epioblasma Flexuosa	Leafshell		EXT	H	12	21	1937	S?
Epioblasma florentina florentina	Yellow-blossom Pearlymussel	END	PROT	X	8	24	1924	S?
Epioblasma florentina florentina	Yellow-blossom Pearlymussel	END	PROT	H	12	21	1937	S?
Epioblasma florentina florentina	Yellow-blossom Pearlymussel	END	PROT	H	12	21	1937	S?
Epioblasma haysiana	Acornshell		EXT	H	12	21	1937	S?

Epioblasma haysiana	Acornshell		EXT	H	12	21	1937	S?
Epioblasma personata	Round Combshell		EXT	H	12	21	1937	S?
Epioblasma propinqua	Tennessee Riffleshell		EXT	H	12	21	1937	S?
Epioblasma propinqua	Tennessee Riffleshell		EXT	H	12	21	1937	S?
Epioblasma stewardsonii	Cumberland Leafshell		EXT	H	12	21	1937	S?
Epioblasma stewardsonii	Cumberland Leafshell		EXT	X				S?
Epioblasma stewardsonii	Cumberland Leafshell		EXT	H	12	21	1937	S?
Epioblasma torulosa torulosa	Tuberculed Blossom Pearlymussel	END	PROT	X	8	15	2000	S?
Epioblasma torulosa torulosa	Tuberculed Blossom Pearlymussel	END	PROT	H	12	21	1937	S?
Epioblasma torulosa torulosa	Tuberculed Blossom Pearlymussel	END	PROT	H	12	21	1937	S?
Fusconaia barnesiana	Tennessee Pigtoe		NOST	H				S?
Fusconaia cor	Shiny Pigtoe	END	PROT	H	12	21	1937	S?
Fusconaia cor	Shiny Pigtoe	END	PROT	H	12	21	1937	S?

Fusconaia cor	Shiny Pigtoe	END	PROT	X				S?
Fusconaia cor	Shiny Pigtoe	END	PROT	X	8	15	2000	S?
Hemistena lata	Cracking Pearlymussel	END	PROT	H	0	0	1980	S?
Lampsilis abrupta	Pink Mucket	END	PROT	E	6	22	2000	S?
Lampsilis abrupta	Pink Mucket	END	PROT	E	8	9	2000	S?
Lampsilis abrupta	Pink Mucket	END	PROT	E	6	29	2000	S?
Lampsilis abrupta	Pink Mucket	END	PROT	E	8	19	1998	S?
Lampsilis abrupta	Pink Mucket	END	PROT	E	8	20	2003	S?
Lampsilis abrupta	Pink Mucket	END	PROT	E	8	2	2000	S?
Lampsilis abrupta	Pink Mucket	END	PROT	E	7	1	1998	S?
Lampsilis abrupta	Pink Mucket	END	PROT	E	6	30	1998	S?

Lampsilis abrupta	Pink Mucket	END	PROT	E	7	9	1999	S?
Lampsilis abrupta	Pink Mucket	END	PROT	E	7	23	1997	S?
Lampsilis abrupta	Pink Mucket	END	PROT	E	8	11	2000	S?
Lampsilis abrupta	Pink Mucket	END	PROT	E	7	25	1997	S?
Lampsilis abrupta	Pink Mucket	END	PROT	E	8	31	1999	S?
Lampsilis abrupta	Pink Mucket	END	PROT	E	8	23	1999	S?
Lampsilis virescens	Alabama Lampmussel	END	PROT	X				S?
Lemiox rimosus	Birdwing Pearlymussel	END	EXT	H	12	21	1937	S?
Lemiox rimosus	Birdwing Pearlymussel	END	EXT	H	12	21	1937	S?

Lexingtonia dolabelloides	Slabside Pearlymussel	C	PROT	H				S?
Lexingtonia dolabelloides	Slabside Pearlymussel	C	PROT	H	12	21	1937	S?
Lexingtonia dolabelloides	Slabside Pearlymussel	C	PROT	H	12	21	1937	S?
Ligumia recta	Black Sandshell		NOST	E	8	18	2000	S?
Ligumia recta	Black Sandshell		NOST	E	8	2	2000	S?
Ligumia recta	Black Sandshell		NOST	E	6	22	2000	S?
Ligumia recta	Black Sandshell		NOST	E	8	10	2000	S?
Ligumia recta	Black Sandshell		NOST	E	8	15	2000	S?
Ligumia recta	Black Sandshell		NOST	E	8	16	2000	S?
Ligumia recta	Black Sandshell		NOST	E	8	11	2000	S?
Ligumia recta	Black Sandshell		NOST	E	6	10	2000	S?
Obovaria olivaria	Hickorynut		EXT	H	8	0	1963	S?
Obovaria retusa	Ring Pink	END	PROT	H	12	21	1937	S?

Obovaria retusa	Ring Pink	END	PROT	E	11	0	1992	S?
Obovaria retusa	Ring Pink	END	PROT	H	12	21	1937	S?
Obovaria retusa	Ring Pink	END	PROT	H	8	20	2003	S?
Obovaria subrotunda	Round Hickorynut		NOST	H	12	21	1937	S?
Obovaria subrotunda	Round Hickorynut		NOST	H	7	8	1999	S?
Obovaria subrotunda	Round Hickorynut		NOST	H	12	21	1937	S?
Plethobasus cicatricosus	White Wartyback	END	PROT	H	12	21	1937	S?
Plethobasus cicatricosus	White Wartyback	END	PROT	E	8	20	2003	S?
Plethobasus cicatricosus	White Wartyback	END	PROT	E	8	23	1999	S?
Plethobasus cooperianus	Orange-foot Pimpleback	END	PROT	H	0	0	1900	S?
Plethobasus cyphyus	Sheepnose	C	PROT	H	12	21	1937	S?
Plethobasus cyphyus	Sheepnose	C	PROT	E	8	15	2000	S?

Plethobasus cyphyus	Sheepnose	C	PROT	E	7	1	1998	S?
Plethobasus cyphyus	Sheepnose	C	PROT	E	7	24	1997	S?
Plethobasus cyphyus	Sheepnose	C	PROT	E	8	20	2003	S?
Plethobasus cyphyus	Sheepnose	C	PROT	E	8	11	1999	S?
Pleurobema clava	Clubshell	END	PROT	H				S?
Pleurobema clava	Clubshell	END	PROT	H	12	21	1937	S?
Pleurobema clava	Clubshell	END	PROT	H	12	21	1937	S?
Pleurobema clava	Clubshell	END	PROT	X	8	15	2000	S?
Pleurobema cordatum	Ohio Pigtoe		NOST	H	12	21	1937	S?
Pleurobema cordatum	Ohio Pigtoe		NOST	E	6	22	2000	S?
Pleurobema cordatum	Ohio Pigtoe		NOST	E	8	15	2000	S?

Pleurobema cordatum	Ohio Pigtoe		NOST	E	8	16	2000	S?
Pleurobema cordatum	Ohio Pigtoe		NOST	E	8	10	2000	S?
Pleurobema cordatum	Ohio Pigtoe		NOST	H	3	30	2000	S?
Pleurobema cordatum	Ohio Pigtoe		NOST	E	8	2	2000	S?
Pleurobema cordatum	Ohio Pigtoe		NOST	E	6	10	2000	S?
Pleurobema cordatum	Ohio Pigtoe		NOST	E	6	10	2000	S?
Pleurobema cordatum	Ohio Pigtoe		NOST	E	8	11	2000	S?
Pleurobema oviforme	Tennessee Clubshell		NOST	H	12	21	1937	S?
Pleurobema oviforme	Tennessee Clubshell		NOST	H				S?
Pleurobema plenum	Rough Pigtoe	END	PROT	H	12	21	1937	S?
Pleurobema plenum	Rough Pigtoe	END	PROT	H	9	22	1998	S?
Pleurobema plenum	Rough Pigtoe	END	PROT	E	7		1999	S?
Pleurobema plenum	Rough Pigtoe	END	PROT	E	6	22	2000	S?

Pleurobema plenum	Rough Pigtoe	END	PROT	E	7	7	1999	S?
Pleurobema plenum	Rough Pigtoe	END	PROT	H	12	21	1937	S?
Pleurobema rubrum	Pyramid Pigtoe		PROT	E	6	10	2000	S?
Pleurobema rubrum	Pyramid Pigtoe		PROT	H	12	21	1937	S?
Pleurobema rubrum	Pyramid Pigtoe		PROT	E	8	10	2000	S?
Pleurobema rubrum	Pyramid Pigtoe		PROT	E	6	22	2000	S?
Pleurobema rubrum	Pyramid Pigtoe		PROT	H	12	21	1937	S?
Pleurobema rubrum	Pyramid Pigtoe		PROT	E	6	27	2000	S?
Pleurobema rubrum	Pyramid Pigtoe		PROT	E	8	15	2000	S?
Potamilus ohiensis	Pink Papershell		NOST	E	9	21	2000	S?
Potamilus ohiensis	Pink Papershell		NOST	E	5	25	2000	S?
Potamilus ohiensis	Pink Papershell		NOST	E	7	27	2000	S?
Ptychobranchus fasciolaris	Kidneyshell		NOST	H	12	21	1937	S?
Ptychobranchus fasciolaris	Kidneyshell		NOST	E	8	16	2000	S?

Ptychobranchus fasciolaris	Kidneyshell		NOST	E	8	10	2000	S?
Ptychobranchus fasciolaris	Kidneyshell		NOST	E	7	9	1999	S?
Ptychobranchus fasciolaris	Kidneyshell		NOST	H	12	21	1937	S?
Ptychobranchus fasciolaris	Kidneyshell		NOST	E	8	2	2000	S?
Ptychobranchus subtentum	Fluted Kidneyshell	C	EXT	H	12	21	1937	S?
Quadrula cylindrica cylindrica	Rabbitsfoot		PROT	H	8	15	2000	S?
Quadrula cylindrica cylindrica	Rabbitsfoot		PROT	H	12	21	1937	S?
Quadrula intermedia	Cumberland Monkeyface	END	PROT	H	12	21	1937	S?
Quadrula intermedia	Cumberland Monkeyface	END	PROT	H	12	21	1937	S?
Quadrula intermedia	Cumberland Monkeyface	END	PROT	X	0	0	1900	S?
Toxolasma cylindrellus	Pale Lilliput	END	PROT	H	12	21	1937	S?
Toxolasma cylindrellus	Pale Lilliput	END	PROT	H	12	21	1937	S?
Toxolasma lividus	Purple Lilliput		NOST	E	8	9	2000	S?

Toxolasma lividus	Purple Lilliput		NOST	E	8	2	1999	S?
Toxolasma lividus	Purple Lilliput		NOST	E	7	9	1999	S?
Toxolasma lividus	Purple Lilliput		NOST	E	7	8	1999	S?
Toxolasma lividus	Purple Lilliput		NOST	E	8	15	2000	S?
Toxolasma lividus	Purple Lilliput		NOST	E	8	16	2000	S?
Toxolasma lividus	Purple Lilliput		NOST	E	8	2	2000	S?
Toxolasma lividus	Purple Lilliput		NOST	E	8	17	1999	S?
Toxolasma lividus	Purple Lilliput		NOST	E	9	22	1998	S?
Toxolasma lividus	Purple Lilliput		NOST	E	8	24	1999	S?
Toxolasma lividus	Purple Lilliput		NOST	E	6	30	1998	S?
Toxolasma lividus	Purple Lilliput		NOST	E	8	10	2000	S?
Toxolasma lividus	Purple Lilliput		NOST	E	6	10	2000	S?

Truncilla truncata	Deertoe		NOST	E	7	7	1999	S?
Truncilla truncata	Deertoe		NOST	E	7	8	1999	S?
Truncilla truncata	Deertoe		NOST	E	6	22	2000	S?
Truncilla truncata	Deertoe		NOST	E	8	1	2000	S?
Truncilla truncata	Deertoe		NOST	E	8	9	2000	S?
Villosa taeniata	Painted Creekshell		NOST	H	12	21	1937	S?
Villosa taeniata	Painted Creekshell		NOST	H	12	21	1937	S?
Snails								
Athearnia anthonyi	Anthony's River Snail	END	PROT	H	12	21	1937	S?
Athearnia anthonyi	Anthony's River Snail	END	PROT	H	12	21	1937	S?
Lithasia geniculata	Ornate Rocksnail		NOST	E				S?
Lithasia lima	Warty Rocksnail		NOST	H				S?
Lithasia salebrosa	Muddy Rocksnail		NOST	E				S?
Lithasia salebrosa	Muddy Rocksnail		NOST	H	12	21	1937	S?
Lithasia salebrosa	Muddy Rocksnail		NOST	H	12	21	1937	S?

Lithasia verrucosa	Varicose Rocksnail		NOST	H	12	21	1937	S?
Lithasia verrucosa	Varicose Rocksnail		NOST	H	12	21	1937	S?
Lithasia verrucosa	Varicose Rocksnail		NOST	E	0	0	1978	S?
Lithasia verrucosa	Varicose Rocksnail		NOST	E	5	0	1977	S?
Pleurocera alveare	Rugged Hornsnail		NOST	H	12	21	1937	S?
Somatogyrus humerosus	Atlas Pebblesnail		HIST	H	12	21	1937	S?

Directions	EO Data
MCKINNEY PIT CAVE (GCAVEAL033.015).	HOBBS, HOBBS, AND DANIEL (1977) REPORTED THE SPECIES IN THIS CAVE; THE DATE WAS NOT GIVEN.
KEY CAVE (GCAVEAL077.003).	COOPER (PERS. COMM.) REPORTED THIS SPECIES FROM THIS LOCALITY ON JANUARY 26, 1976.
MCKINNEY PIT (GCAVEAL033*003*TV) CAVE.	KUHAJDA (PERS. COMM. 1999) REPORTED COLLECTING SHRIMP SPECIMENS FROM THIS LOCALITY SUMMER 1999. SPECIMENS ARE UNDER INVESTIGATION BY JOHN COOPER (NC) AND HORTON HOBBS III (OHIO) FOR CORRECT TAXONOMIC IDENTIFICATION. ALSO, KUHAJDA AND MAYDEN (2000) REPORTE
ELBOW CAVE (GCAVEAL033*037*TV).	KUHAJDA (PERS. COMM. 1999) REPORTED COLLECTING SHRIMP SPECIMENS FROM THIS LOCALITY SUMMER 1999. SPECIMENS ARE UNDER INVESTIGATION BY JOHN COOPER (NC) AND HORTON HOBBS III (OHIO) FOR CORRECT TAXONOMIC IDENTIFICATION. ALSO, KUHAJDA AND MAYDEN (2000) REPORTE
MCKINNEY PIT. (GCAVEAL033.015). THIS IS TYPE LOCALITY FOR THIS SPECIES.	COOPER (PERS. COMM.) REPORTED THE SPECIES FROM THIS LOCALITY. BOSCHUNG (1976) ALSO REPORTED THIS SPECIES AT THIS LOCALITY.
KEY CAVE (GCAVEAL077*003*TV), LAUDERDALE CO. AL.	COOPER (PERS. COMM.) REPORTED THE SPECIES FROM THIS LOCALITY. BOSCHUNG (1976) ALSO REPORTED THIS SPECIES FROM THIS LOCALITY.
LITTLE BEAR CREEK, 5.6 AIR KM SOUTHWEST OF TUSCUMBIA	ONE SPECIMEN, UMMZ CATALOG NO. 132502
CAVE SPRING	SIX SPECIMENS WERE COLLECTED AT THIS LOCALITY ON NOVEMBER 5, 1937 AND ARE STORED IN THE UNIVERSITY OF MICHIGAN MUSEUM OF ZOOLOGY (CAT. NOS. 132689-132690);(PREIMPOUNDMENT COLLECTION).

TUSCUMBIA SPRING IN DOWNTOWN TUSCUMBIA.	GILBERT (1887 AND 1891) COMMENTED THAT THE SPECIES WAS EXCEEDINGLY ABUNDANT IN THIS LOCALITY IN 1884 AND 1889 COLLECTIONS. FURTHER COLLECTIONS REPORTED BY ARMSTRONG (1971) SEPTEMBER 1962, JULY 1964, APRIL 1965 AND MARCH 1967. ALSO, KUHAJDA AND MAYDEN (199
CAVE SPRING, NEAR SMITHSONIA.	TWO SPECIMENS COLLECTED THIS LOCALITY ON NOVEMBER 5, 1937 AND ARE STORED IN THE UNIVERSITY OF MICHIGAN MUSEUM OF ZOOLOGY (CAT. NO. 132686).
KEY CAVE, 1.14 AIR MILES NE OF TENNESSEE RIVER MILE 248; CAVE NO. AL99 IN AL CAVE SURVEY (T35/R12W/S35).	KUHAJDA AND MAYDEN (1996) REPORTED RESULTS OF 1995-1996 SURVEYS AS TOTAL OF 30-33 INDIVIDUALS OBSERVED DURING FOUR SAMPLING TRIPS (FOR MEAN OF 7.5-8.3 INDIVIDUALS PER TRIP). HOWEVER, THEY INDICATE THAT SOME INDIVIDUALS MAY HAVE BEEN OBSERVED ON MORE THAN
ELBOW CAVE (GCAVEAL033*037*TV).	KUHAJDA AND MAYDEN (2000) OBSERVED 1 SPECIMEN ON OCT. 6, 1999, DURING SURVEY OF ELBOW CAVE.
KEY CAVE, 1.14 AIR MILES NE TENNESSEE RIVER MILE 248; AL CAVE #99 IN AL CAVE SURVEY.	KUHAJDA AND MAYDEN (1996) REPORTED 1 (60 MM SL)SPECIMEN COLLECTED, FIN CLIPPED, AND RELEASED FROM THIS LOCALITY IN 1996 SURVEY. GODWIN (1996) ALSO REPORTED THIS OBSERVATION. KUHAJDA AND MAYDEN (1996) ALSO REPORTED THAT (PRESUMABLY) THE SAME INDIVIDUAL HAS
MCKINNEY PIT (GCAVEAL033.015).	COOPER (PERS. COMM.) REPORTED THE SPECIES FROM THIS LOCALITY IN 1977. ALSO, KUHAJDA AND MAYDEN (2000) OBSERVED 1 SPECIMEN ON JULY 7, 1999; 10 SPECIMENS ON SEPT. 22, 1999; 1 SPECIMEN ON NOV. 9, 1999; AND ALSO 5 SPECIMENS ON FEB. 23, 2000. THREE SPECIMENS W
THOMASON CAVE (GCAVEAL033.012).	COOPER (PERS. COMM.) REPORTED THE SPECIES FROM THIS LOCALITY.

SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 251.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED 2 LIVE SPECIMENS AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 11, 2000.

TENNESSEE RIVER MILE 247.0 AND 247.3; SEVENMILE ISLAND AREA OF WILSON DAM TAILWATERS.	GARNER (1999) REPORTED 1 WEATHERED DEAD SPECIMEN AT TRM 247.0, AUG. 25, 1999, DURING FRESHWATER MUSSEL SURVEY. ALSO, GARNER (2000)
TENNESSEE RIVER BETWEEN BUCK ISLAND AND SEVEN MILE ISLAND. PLOTTED LAT/LONG COORDINATES ACCORDING TO DIRECTIONS GIVEN. ALSO, TRM 249.3 PLOTS HERE.	MCGREGOR, O'NEIL, AND GARNER (1998) COLLECTED WEATHERED DEAD SHELLS FROM THIS LOCALITY DURING FRESHWATER MUSSEL SURVEY, JULY 1, 1998. ALSO, GARNER (1999) REPORTED 1 RELIC SPECIMEN AT TRM 249.3, AUG. 2, 1999, DURING FRESHWATER MUSSEL SURVEY. GARNER (2000)
SEVENMILE ISLAND AREA, MUSCLE SHOALS, WILSON DAM TAILWATER OF PICKWICK RESERVOIR, TENNESSEE RIVER MILES 247-253. PLOTTED IN BUCK ISLAND CHUTE ON SOUTH SIDE OF SEVEN MILE ISLAND, CA. RIVER MILE 248.9.	STANSBERRY (1964) AND ISOM (1969) REPORTED THE SPECIES FROM THIS LOCALITY.
TENNESSEE RIVER MILE 249.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED A RELIC SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 15, 2000.
TENNESSEE RIVER MILE 249.7, UPPER END OF BUCK ISLAND CHUTE.	GARNER (2001) REPORTED ONE LIVE SPECIMEN (L=49, H=46, W=37 MM) AT THIS LOCALITY DURING A SUMMER 2001 SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER AT WILSON DAM TAILWATERS. TRM 245.1.	GARNER (2003) REPORTED RELICT SPECIMENS AT THIS LOCATION.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 249.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED A RELIC SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 15, 2000.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.

SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
CYPRESS CREEK AT FLORENCE. PLOTTED AT CREEK MILE 4.2 AT UNNUMBERED COUNTY ROAD CROSSING (WATERLOO RD). EXACT LOCALITY UNKNOWN.	ORTMANN (1925) REPORTED THE SPECIES FROM THIS LOCALITY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.

SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER AT TUSCUMBIA, ALABAMA. PLOTTED JUST DOWNSTREAM FROM MOUTH OF SPRING CREEK AT RIVER MILE 251.9. EXACT LOCALITY UNKNOWN.	SPECIMENS IN OHIO STATE UNIVERSITY MUSEUM (CAT. NOS. 10371.2 AND 10371.4) FROM HENRY MOORE'S COLLECTION FROM THIS LOCALITY. SPECIMENS WERE TAKEN IN 1800'S, BUT MORE SPECIFIC COLLECTION DATE UNKNOWN.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 249.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED A RELIC SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 15, 2000.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SPRING CREEK AT TUSCUMBIA. EXACT LOCALITY UNKNOWN.	ORTMANN (1925) REPORTED SPECIMENS FROM THIS LOCALITY. DATE OF COLLECTION UNKNOWN.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.

CYPRESS CREEK AT FLORENCE	ORTMANN (1925) REORTED THE SPECIES COLLECTED BY WALKER FROM THIS LOCALITY. SPEC. EXAMINED BY ORTMANN. COLLECTING DATE UNKNOWN.
TENNESSEE RIVER MILE 249.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED A RELIC SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 15, 2000.
TENNESSEE RIVER AT HEAD OF SEVEN-MILE ISLAND, MUSCLE SHOALS.	SPECIMEN FROM MUSCLE SHOALS IN WALKER COLL., EXAMINED BY ORTMANN; ALSO, DEAD SHELL FOUND BY ORTMANN AT FLORENCE; ALSO, DR. PAUL YOKLEY, JR. (PERS. COMM.) INDICATED THAT HE HAD COLLECTED SPECIMENS (LIVE OR RELICT??) FROM THIS LOCALITY IN THE 1980'S.
TENNESSEE RIVER MILE 248.0, LOWER END OF SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED A LIVE SPECIMEN (L=116, H=92, W=66 MM) AT THIS LOCALITY DURING A SURVEY, JUNE 22, 2000.
TENNESSEE RIVER MILE 253.3, WILSON DAM TAILWATERS.	GARNER (2000) REPORTED A RELIC SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 9, 2000.
TENNESSEE RIVER MILE 247.4, SEVENMILE ISLAND, SECONDARY CHANNEL (MID-CHANNEL).	GARNER (2000) REPORTED A LIVE SPECIMEN (3 YEARS OLD) AT THIS LOCALITY DURING A MUSSEL SURVEY, JUNE 29, 2000.
TENNESSE RIVER MI. 252.8-255.8. PLOTTED AT RM 252.8.	KOCH (PERS. COMM.) REPORTED TWO MALES AND ONE FEMALE COLLECTED AND RETURNED ALIVE BY TVA DIVERS AT RIVER MILE 255.8. ISOM (1978) AND GOOCH ET AL. (1979) REPORTED 4 SPECIMENS FROM THIS LOCALITY. ALSO, GARNER (1998, FIELD NOTES) REPORTED 2 LIVE SPECIMENS AT
TENNESSEE RIVER AT WILSON DAM TAILWATERS. TRM 245.1.	GARNER (2003) REPORTED 1 SPECIMEN AT THIS LOCATION.
TENNESSEE RIVER MILE 255.5-256.2, 'MCFARLAND PARK BED' (TRM 255.5) AND 'CYPRESS CREEK SITE' (TRM 254.7) IN RICHARDSON'S (1993) REPORT. DOT AT TRM 255. THE CENTRUM OF TN RIVER MILES 251-256 ALSO PLOTS HERE.	RICHARDSON (1993) REPORTED AVERAGE DENSITY OF 0.1/M2 AT MCFARLAND SITE LOCALITY. DIVERS SAMPLED 0.25 SQUARE METER QUADRAT. TOTAL OF 19 INDIVIDUALS OBSERVED: 18 IN LINE TRANSECT AT CYPRESS CREEK SITE (TRM 254.7) AND ONE AT MCFARLAND SITE (TRM 255.5). ALSO,
TENNESSEE RIVER AT LOWER END OF BUCK ISLAND, TRM 249. PLOTTED LAT/LONG COORDINATES ACCORDING TO DIRECTIONS GIVEN.	MCGREGOR, O'NEIL, AND GARNER (1998) COLLECTED LIVE SPECIMENS FROM THIS LOCALITY DURING FRESHWATER MUSSEL SURVEY, JULY 1, 1998.
TENNESSEE RIVER SECONDARY CHANNEL, ABOVE PIPPIN TOWHEAD. PLOTTED LAT/LONG COORDINATES ACCORDING TO DIRECTIONS GIVEN.	MCGREGOR, O'NEIL, AND GARNER (1998) COLLECTED A WEATHERED DEAD SHELL FROM THIS LOCALITY DURING FRESHWATER MUSSEL SURVEY, JUNE 30, 1998.

TENNESSEE RIVER MILE 252.0, SEVENMILE ISLAND SECONDARY CHANNEL. TENNESSEE RIVER MILE 252.4 ALSO PLOTS HERE.	GARNER (1999) REPORTED 1 RELIC SPECIMEN AT THIS LOCALITY, JULY 9, 1999, DURING FRESHWATER MUSSEL SURVEY. ALSO, GARNER (1998, FIELD NOTES) REPORTED 1 RELIC SPECIMEN AT TRM 252.4 AS A RESULT OF FRESHWATER MUSSEL SURVEYS CONDUCTED AUG 17, 1998.
TENNESSEE RIVER, TRM 245.7; T4S, R12W, SECTION 6; NEAR HEAD OF BUCK ISLAND. PLOTTED AT ABOVE LAT/LONG.	GARNER (1997, EMAIL) REPORTED 1 SPECIMEN COLLECTED ON JULY 23, 1997, AT THIS LOCALITY DURING MUSSEL SURVEY.
TENNESSEE RIVER MI. 251.0 (TRM 251.3 ALSO PLOTS HERE); SEVENMILE ISLAND SECONDARY CHANNEL.	ISOM (1978) AND GOOCH ET AL. (1979) REPORTED 1 SPECIMEN FROM THIS LOCALITY IN 1978. ALSO, GARNER (1999) REPORTED 1 LIVE SPECIMEN FROM THIS LOCALITY, AUG. 23, 1999, DURING A FRESHWATER MUSSEL SURVEY. ALSO, GARNER (2000) REPORTED ONE LIVE SPECIMEN (AGE 7-8
TENNESSEE RIVER, PICKWICK RESERVOIR, ALABAMA. IN SHELL PILES HARVESTED FROM VICINITY OF SEVENMILE ISLAND. PLOTTED AT RM. 250.0.	KOCH REPORTED THIRTEEN INDIVIDUALS OBSERVED IN SHELL PILES HARVESTED BY MUSSEL FISHERMEN. SPECIMENS OLD AND SOMEWHAT ERODED. LAYZER (1999) REPORTED 2 LIVE SPECIMENS COLLECTED BY JEFF GARNER ON 7/25/97. (ONE WAS FOUND DEAD, 11/12/98, AT NORMANDY HATCHERY,
SEVENMILE ISLAND AREA OF WILSON DAM TAILWATERS, TENNESSEE RIVER MILES 247 TO 253. DOT AT CENTRUM, APPROX. RIVER MILE 249.7. ALSO, A LOCALITY IN THE MAIN CHANNEL (LAT/LONG 344428N/0874543W) AND ONE IN THE SECONDARY CHANNEL (LAT/LONG 344427N/	MCGREGOR (PERS. COMM. WITH U.S. FISH & WILDLIFE SERVICE 1998) REPORTED 1 MALE AND 2 GRAVID FEMALES FROM STATIONS SPECIFIED BY LAT/LONG IN 1997. MCGREGOR & GARNER (1997) ALSO REPORTED THIS RECORD. STANSBERY (1964) REPORTED THE SPECIES PRESENT AT THIS LOCAL
TENNESSEE RIVER MILE 250.7, SEVENMILE ISLAND SECONDARY CHANNEL.	GARNER (1999) REPORTED 1 LIVE SPECIMEN AT TRM 250.7, AUG. 23, 1999, DURING FRESHWATER MUSSEL SURVEY.
SPRING CREEK AT TUSCUMBIA. PLOTTED AT CREEK MILE 3.5 AT SPRING CREEK GOLF COURSE.	ORTMANN (1925) REPORTED SPECIMENS COLLECTED BY CALL PRIOR TO 1885. EXACT COLLECTING DATE UNKNOWN.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.

SEVENMILE ISLAND AREA, MUSCLE SHOALS, WILSON DAM DAILWATER, TENNESSEE RIVER MILES (APPROXIMATELY) 247-253.PLOTTED IN BUCK ISLAND CHUTE, TENNESSEE RIVER MILE 249.5.	ISOM (1969), STANSBERY (1964) AND ORTMANN (1924) REPORTED THE SPECIES FROM THIS LOCALITY. NO SPECIFIC COLLECTION DATES GIVEN.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER, KOGERS ISLAND, PLOTTED AT TRM 239.0.	GARNER (2000) REPORTED 1 RELIC SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 18, 2000.
TENNESSEE RIVER MILE 255.3, ACROSS FROM MCFARLAND PARK.	GARNER (2000) REPORTED 1 RELIC SPECIMEN AND 1 LIVE SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 2, 2000.
TENNESSEE RIVER MILE 242.2, JUST UPSTREAM OF MULBERRY CREEK.	GARNER (2000) REPORTED A RELIC SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, JUNE 22, 2000.
TENNESSEE RIVER MILE 253.3, WILSON DAM TAILWATERS.	GARNER (2000) REPORTED 2 LIVE SPECIMENS AT THIS LOCALITY DURING MUSSEL SURVEYS, AUG 9 & 10, 2000.
TENNESSEE RIVER MILES 247.0, 247.2, AND 247.3, LOWER END OF SEVENMILE ISLAND, PRIMARY AND SECONDARY CHANNELS.	GARNER (2000) REPORTED 3 LIVE SPECIMENS (2 FEMALES, 1 MALE) AT TRM 247.0, 1 LIVE SPECIMEN (FEMALE) AT TRM 247.2, AND 1 LIVE SPECIMEN (L=88MM, AGE 3-4 YRS) AT TRM 247.3 DURING MUSSELS SURVEYS ON JUNE 10 AND AUG 15, 2000.
TENNESSEE RIVER MILE 249.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED 2 LIVE SPECIMENS AT THIS LOCALITY DURING MUSSEL SURVEYS, AUG 15 & 16, 2000.
TENNESSEE RIVER MILE 251.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED 2 LIVE SPECIMENS (MALE AND FEMALE) AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 11, 2000.
TENNESSEE RIVER MILE 249.1, BUCK ISLAND CHUTE.	GARNER (2000) REPORTED 3 LIVE SPECIMENS (2 MALES, 1 FEMALE) AT THIS LOCALITY DURING A MUSSEL SURVEY, JUNE 10, 2000.
TENNESSEE RIVER. SEVENMILE ISLAND AREA, MUSCLE SHOALS, WILSON DAM TAILWATER OF PICKWICK RESERVOIR, APPROXIMATE RIVER MILES 247-253. PLOTTED AT RIVER MILE 248.8, 0.8 MILE NORTHWEST OF MOUTH OF LITTLE BEAR CREEK.	STANSBERY (1964) AND ISOM (1969) REPORTED THE SPECIES FROM THIS LOCALITY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.

KROGERS ISLAND AREA OF TENNESSEE RIVER. PLOTTED AT HEAD OF ISLAND.	TERRY RICHARDSON (PERS. COMM.) REPORTED OBSERVATION OF THIS SPECIES AT THIS LOCALITY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER AT WILSON DAM TAILWATERS. TRM 245.1.	GARNER (2003) REPORTED RELICT SPECIMENS AT THIS LOCATION.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 252.0, SEVENMILE ISLAND SECONDARY CHANNEL.	GARNER (1999) REPORTED 1 RELIC SPECIMEN AT THIS LOCALITY, JULY 8, 1999, DURING FRESHWATER MUSSEL SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER AT WILSON DAM TAILWATERS. TRM 245.1.	GARNER (2003) REPORTED 2 SPECIMENS AT THIS LOCATION.
TENNESSEE RIVER, VICINITY OF SEVENMILE ISLAND, PICKWICK RESERVOIR: ONE STATION IN MAIN CHANNEL (344350N/874635W) ONE IN SECONDARY CHANNEL (344426N/874615W). DOT AT CENTRUM. ALSO, TENNESSEE RIVER MILES 248.9, 249.1, 249.6 AND 250.5 PLOT WITH	GARNER (E-MAIL TO STUART MCGREGOR) REPORTED ONE SPECIMEN IN THE VICINITY OF SEVENMILE ISLAND JULY 1999 (COLLECTORS WERE:GARNER, DICK BIGGINS, DON HUBBS, & ALAN JONES). ALSO, GARNER (PERS. COMM.) REPORTED THE FOLLOWING: 1 LIVE ON 8-6-97 (IN CAPTIVITY WITH
SEVENMILE ISLAND AREA, MUSCLE SHOALS, WILSON DAM TAILWATER OF PICKWICK RESERVOIR, APPROX. TENN. RIV. MI 247-253.	ISOM (1969) REPORTED SPECIMENS FROM THIS SITE. SEE ALSO STANSBERY, D. (1964).
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILES 249.3-249.8 SEVENMILE ISLAND AREA, MUSCLE SHOALS ALSO PLOTS HERE. PLOTTED AT APPROX. RIVER MILE 250.5. ALSO, PLOTS AT TENNESSEE RIVER AT LEE SIDE OF BUCK ISLAND, LOWER END; PLOTTED LAT/LONG COORDINATES ACCORDING TO DIR	GARNER (E-MAIL TO STUART MCGREGOR) REPORTED ONE SPECIMEN IN THE VICINITY OF SEVENMILE ISLAND JULY 1999 (COLLECTORS WERE GARNER, DICK BIGGINS, DON HUBBS, & ALAN JONES). ALSO, ISOM (1969) AND STANSBERY (1964) REPORTED SPECIMENS FROM THIS LOCALITY. DATE OF C

TENNESSEE RIVER AT LOWER END OF BUCK ISLAND, TRM 249. PLOTTED LAT/LONG COORDINATES ACCORDING TO DIRECTIONS GIVEN. ALSO PLOTS AT TRM 249.1.	MCGREGOR, O'NEIL, AND GARNER (1998) COLLECTED LIVE SPECIMENS FROM THIS LOCALITY DURING FRESHWATER MUSSEL SURVEY, JULY 1, 1998. ALSO, GARNER (1998, FIELD NOTES) CONFIRMED THE ABOVE COLLECTIOS (AT TRM 249.1: 1 LIVE SPECIMEN; AT TRM 249: 3 LIVE SPECIMENS).
TENNESSEE RIVER, TRM 249.6, NEAR HEAD OF BUCK ISLAND.	GARNER (1997, EMAIL) REPORTED 1 SPECIMEN COLLECTED ON JULY 24, 1997, FROM TRM 249.6 DURING MUSSEL SURVEY.
TENNESSEE RIVER AT WILSON DAM TAILWATERS. TRM 245.1.	GARNER (2003) REPORTED 1 SPECIMEN AT THIS LOCATION.
TENNESSEE RIVER AT TRM 248.9, DOWNSTREAM OF BUCK ISLAND. PLOTTED LAT/LONG COORDINATES ACCORDING TO DIRECTIONS GIVEN.	MCGREGOR, O'NEIL, AND GARNER (1998) COLLECTED LIVE SPECIMENS FROM THIS LOCALITY DURING FRESHWATER MUSSEL SURVEY, JULY 1, 1998. ALSO, GARNER (1999) REPORTED 1 LIVE SPECIMEN AT TRM 248.9, AUG. 11, 1999, DURING FRESHWATER MUSSEL SURVEY.
TENNESSEE RIVER AT TUSCUMBIA. EXACT LOCALITY UNKNOWN, PLOTTED AT RIVER MILE 252.0.	ORTMANN (1919) REPORTED SPECIMENS COLLECTED BY H. H. SMITH AT THIS LOCALITY. COLLECTION DATE NOT GIVEN. SPECIMENS AT CARNEGIE MUSEUM.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 249.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED A RELIC SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 15, 2000.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 248.0, LOWER END OF SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED TWO LIVE SPECIMENS AT THIS LOCALITY DURING A MUSSEL SURVEY, JUNE 22, 2000.
TENNESSEE RIVER MILES 247.2, 247.3, AND 247.4; LOWER END OF SEVENMILE ISLAND, PRIMARY AND SECONDARY CHANNELS.	GARNER (2000) REPORTED ONE LIVE SPECIMEN AT TRM 247.2, ONE LIVE SPECIMEN AT TRM 247.3, AND FOUR LIVE SPECIMENS AT TRM 247.4, DURING MUSSEL SURVEYS: JUNE 10, JUNE 27, JUNE 29, AND AUG 15, 2000.

TENNESSEE RIVER MILE 249.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED TWO LIVE SPECIMENS AND ONE RELIC SPECIMEN AT THIS LOCALITY DURING MUSSEL SURVEYS, AUG 15 AND 16, 2000.
TENNESSEE RIVER MILE 253.3, WILSON DAM TAILWATERS.	GARNER (2000) REPORTED THREE LIVE SPECIMENS AT THIS LOCALITY DURING MUSSEL SURVEYS, AUG 9 AND 10, 2000.
SPRING CREEK AT TUSCUMBIA, LAT/LONG: 344343N, 0874233W, PLOTTED AT CREEK MILE 3.0.	GARNER (2000) REPORTED A RELIC SPECIMEN AT THIS LOCALITY DURING MUSSEL SURVEY, MARCH 30, 2000.
TENNESSEE RIVER MILE 255.3, ACROSS FROM AND AT MCFARLAND PARK.	GARNER (2000) REPORTED SIX LIVE SPECIMENS AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 2, 2000.
TENNESSEE RIVER MILE 247.0, LOWER END OF SEVENMILE ISLAND, PRIMARY CHANNEL.	GARNER (2000) REPORTED TWO LIVE SPECIMENS AT THIS LOCALITY DURING MUSSEL SURVEY, JUNE 10, 2000.
TENNESSEE RIVER MILE 249.1, BUCK ISLAND CHUTE.	GARNER (2000) REPORTED FIVE LIVE SPECIMENS AT THIS LOCALITY DURING A MUSSEL SURVEY, JUNE 10, 2000.
TENNESSEE RIVER MILE 251.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED FOUR LIVE SPECIMENS AT THIS LOCALITY DURING MUSSEL SURVEYS, AUG 10 AND 11, 2000.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
WILSON DAM TAILWATER OF PICKWICK RESERVOIR, SEVENMILE ISLAND AREA, TENNESSEE RIVER MILE 247-253. PLOTTED AT APPROXIMATE RIVER MILE 249.5 AT BUCK ISLAND CHUTE.	ISOM (1969) REPORTED THE SPECIES FROM THIS LOCALITY. COLLECTION DATE UNKNOWN.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER AT TRM 241.4 NEAR SMITHSONIA BEACON. PLOTTED ACCORDING TO LAT/LONG COORDINATES GIVEN IN DIRECTIONS.	MCGREGOR, O'NEIL, AND GARNER (1998) COLLECTED A WEATHERED DEAD SHELL FROM THIS LOCALITY DURING FRESHWATER MUSSEL SURVEY, SEPT. 22, 1998.
TENNESSEE RIVER MILE 249.1. ALSO, TENNESSEE RIVER, UPPER PICKWICK RESERVOIR NEAR SEVEN-MILE ISLAND PLOTS HERE. ALSO, TENNESSEE RIVER MILE 249, AT LOWER END OF BUCK ISLAND PLOTS HERE.	JEFF GARNER, IN E-MAIL TO STUART MCGREGOR, REPORTED ONE SPECIMEN IN VICINITY OF SEVENMILE ISLAND JULY 1999 (GARNER, R. BIGGINS, DON HUBBS & ALAN JONES COLLECTORS). ALSO, JEFF GARNER (PERS. COMM.)REPORTED ONE LIVE FOUND BY HIMSELF & BOB BUTLER AT RIVER MIL
TENNESSEE RIVER MILE 248.0, LOWER END OF SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED A LIVE SPECIMEN (L=52, H=57, W=34 MM) AT THIS LOCALITY DURING A SURVEY, JUNE 22, 2000.

TENNESSEE RIVER MILE 249.9.	GARNER (1999) REPORTED 1 LIVE SPECIMEN AT TRM 249.9, JULY 7, 1999, DURING FRESHWATER MUSSEL SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 247.0, LOWER END OF SEVENMILE ISLAND, PRIMARY CHANNEL.	GARNER (2000) REPORTED ONE LIVE SPECIMEN AT THIS LOCALITY DURING MUSSEL SURVEY, JUNE 10, 2000.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 251.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED A RELIC SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 10, 2000.
TENNESSEE RIVER MILE 248.0, LOWER END OF SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED ONE LIVE SPECIMEN AND TWO FRESH DEAD SHELLS AT THIS LOCALITY DURING A MUSSEL SURVEY, JUNE 22, 2000.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 247.4, LOWER END OF SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED TWO LIVE SPECIMENS AT THIS LOCALITY DURING MUSSEL SURVEY, JUNE 27, 2000.
TENNESSEE RIVER MILE 249.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED ONE RELIC SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 15, 2000.
TENNESSEE RIVER AT COLBERT FERRY BOAT RAMP. PLOTTED AT LAT/LONG: 345019N, 0875640W, NEAR RIVER MILE 236.5.	GARNER (2000) REPORTED FOUR FRESH DEAD SPECIMENS AT THIS LOCALITY DURING MUSSEL SURVEY, SEPT 21, 2000.
TENNESSEE RIVER 238.9, KOGERS ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED TWO WEATHERED DEAD SPECIMENS AT THIS LOCALITY DURING A MUSSEL SURVEY, MAY 25, 2000.
TENNESSEE RIVER MILE 238.4, KOGERS ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED ONE WEATHERED DEAD SPECIMEN, TWO LIVE SPECIMENS, AND ONE FRESH DEAD SPECIMEN AT THIS LOCALITY DURING MUSSEL SURVEYS, MARCH 21, APRIL 18, AND JULY 27, 2000.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 249.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED ONE LIVE SPECIMEN (L=92, H=52, W=30 MM, AGE LESS THAN 10 YEARS) AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 16, 2000.

TENNESSEE RIVER MILE 251.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED ONE LIVE SPECIMEN (L=50, H=26, W=13 MM, AGE 3-4 YEARS) AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 10, 2000.
TENNESSEE RIVER MILE 252.0. SEVENMILE ISLAND AREA, MUSCLE SHOALS, WILSON DAM TAILWATER.	GARNER (E-MAIL TO STUART MCGREGOR) REPORTED A FAIRLY FRESH DEAD SPECIMEN FROM VICINITY OF SEVENMILE ISLAND AREA 1999 (COLLECTORS WERE: GARNER, DICK BIGGINS, DON HUBBS, & ALAN JONES). ALSO, STANSBERY (1964) AND ISOM (1969) REPORTED THE SPECIES FROM THIS LO
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 255.3, ACROSS FROM AND AT MCFARLAND PARK.	GARNER (2000) REPORTED ONE LIVE SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 2, 2000.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 249.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED A RELIC SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 15, 2000.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER AT TUSCUMBIA	CITED FROM HINKLEY, A. 1906. NAUT. 20(3):34-36, (4):40-44, (5):52-55
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 253.5 (AND 253.3 ALSO PLOTS HERE), WILSON DAM TAILWATERS NEAR SEVENMILE ISLAND, JUST DOWNSTREAM OF SHEFFIELD BOAT RAMP.	GARNER (1999) REPORTED 1 LIVE SPECIMEN AT TRM 253.5, JULY 6, 1999, DURING FRESHWATER MUSSEL SURVEY. ALSO, GARNER (2000) REPORTED 4 LIVE SPECIMENS AT TRM 253.3 DURING MUSSEL SURVEYS, AUG 2, 3 AND 9, 2000.

SEVENMILE ISLAND AREA OF WILSON DAM TAILWATERS; TENNESSEE RIVER MILES 247-253. DOT AT CENTRUM, APPROX. TRM 249.7. ALSO INCLUDES TENNESSEE RIVER MILES 251-256.	GARNER (1999) REPORTED 3 FRESH DEAD AT TRM 251.0, ON AUG. 23, 1999; 1 WEATHERED DEAD SPECIMEN AT TRM 250.0, JULY 7, 1999; 2 LIVE SPECIMENS AT TRM 249.8, JULY 7, 1999; 1 FRESH DEAD AT TRM 249.1, JULY 8, 1999; AND ALSO 1 FRESH DEAD AT TRM 249.4, AUG. 2, 199
TENNESSEE RIVER MILE 252.0, SEVENMILE ISLAND SECONDARY CHANNEL.	GARNER (1999) REPORTED 2 WEATHERED DEAD SPECIMENS AT TRM 252.0, JULY 9, 1999, DURING FRESHWATER MUSSEL SURVEY.
TENNESSEE RIVER MILE 254.9, MOUTH OF CYPRESS CREEK.	GARNER (1999) REPORTED 5 LIVE SPECIMENS AT TRM 254.9, JULY 8, 1999, DURING FRESHWATER MUSSEL SURVEY.
TENNESSEE RIVER MILES 247.3 AND 247.4; LOWER END OF SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED NINE LIVE SPECIMENS, 23 FRESH DEAD SPECIMENS, AND 23 WEATHERED DEAD SPECIMENS AT THIS LOCALITY DURING MUSSEL SURVEYS: JUNE 27, JUNE 29, AND AUG 15, 2000.
TENNESSEE RIVER MILE 249.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED TWO LIVE SPECIMENS AT THIS LOCALITY DURING MUSSEL SURVEYS, AUG 15 AND 16, 2000.
TENNESSEE RIVER MILE 255.3, ACROSS FROM AND AT MCFARLAND PARK.	GARNER (2000) REPORTED SIX LIVE SPECIMENS AT THIS LOCALITY DURING MUSSEL SURVEYS, AUG 1 AND 2, 2000.
TENNESSEE RIVER MILE 239.0, KOGERS ISLAND PRIMARY CHANNEL.	GARNER (1999) REPORTED 1 LIVE SPECIMEN AT TRM 239.0, AUG. 17, 1999, DURING FRESHWATER MUSSEL SURVEY.
TENNESSEE RIVER AT TRM 241.4 NEAR SMITHSONIA BEACON. PLOTTED ACCORDING TO LAT/LONG COORDINATES GIVEN IN DIRECTIONS.	MCGREGOR, O'NEIL, AND GARNER (1998) COLLECTED LIVE SPECIMENS FROM THIS LOCALITY DURING FRESHWATER MUSSEL SURVEY, SEPT. 22, 1998.
TENNESSEE RIVER MILES 256.0 AND 256.1, ACROSS FROM FLORENCE.	GARNER (1999) REPORTED 1 FRESH DEAD SPECIMEN AT TRM 256.0, AUG. 24, 1999, DURING FRESHWATER MUSSEL SURVEY.
TENNESSEE RIVER SECONDARY CHANNEL, ABOVE PIPPIN TOWHEAD. PLOTTED LAT/LONG COORDINATES ACCORDING TO DIRECTIONS GIVEN.	MCGREGOR, O'NEIL, AND GARNER (1998) COLLECTED LIVE SPECIMENS FROM THIS LOCALITY DURING FRESHWATER MUSSEL SURVEY, JUNE 30, 1998.
TENNESSEE RIVER MILE 251.3, SEVENMILE ISLAND, SECONDARY CHANNEL.	GARNER (2000) REPORTED ONE LIVE SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 10, 2000.
TENNESSEE RIVER MILE 247.0, LOWER END OF SEVENMILE ISLAND, PRIMARY CHANNEL.	GARNER (2000) REPORTED ONE LIVE SPECIMEN AT THIS LOCALITY DURING MUSSEL SURVEY, JUNE 10, 2000.

SEVENMILE ISLAND AREA OF WILSON DAM TAILWATERS; TENNESSEE RIVER MILE 249.9.	GARNER (1999) REPORTED 1 LIVE SPECIMEN AT TRM 249.9, JULY 7, 1999, DURING FRESHWATER MUSSEL SURVEY. ALSO, GARNER (1998, FIELD NOTES) REPORTED 1 FRESH DEAD SPECIMEN FROM TRM 249.3, AND 1 WEATHERED DEAD SPECIMEN AT TRM 255.7 AS RESULT OF FRESHWATER MUSSEL S
TENNESSEE RIVER MILE 252.0, SEVENMILE ISLAND SECONDARY CHANNEL.	GARNER (1999) REPORTED 1 FRESH DEAD SPECIMEN AT TRM 252.0, JULY 8, 1999, DURING FRESHWATER MUSSEL SURVEY.
TENNESSEE RIVER MILE 238.1, JUST DOWNSTREAM OF KOGERS ISLAND.	GARNER (2000) REPORTED ONE FRESH DEAD SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, JUNE 22, 2000.
TENNESSEE RIVER MILE 255.3, ACROSS FROM MCFARLAND PARK.	GARNER (2000) REPORTED ONE LIVE SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 1, 2000.
TENNESSEE RIVER MILE 253.3, WILSON DAM TAILWATERS.	GARNER (2000) REPORTED ONE LIVE SPECIMEN AT THIS LOCALITY DURING A MUSSEL SURVEY, AUG 9, 2000.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.

SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 249.8.	ISOM (1978) REPORTED 5 SPECIMENS FROM THIS LOCALITY. DATE OF COLLECTION UNKNOWN.
TENNESSEE RIVER, TUSCUMBIA. PLOTTED AT APPROX. RIVER MILE 251.9.	UNIVERSITY OF MICHIGAN MUSEUM OF ZOOLOGY CATALOG NO. 43519. COLLECTION DATE UNKNOWN.
TENNESSEE RIVER AT TUSCUMBIA. PLOTTED AT RIVER MILE 252.0.	UNIVERSITY OF MICHIGAN MUSEUM OF ZOOLOGY CATALOG NO. 132453. DATE OF COLLECTION UNKNOWN.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.

SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
TENNESSEE RIVER MILE 252.9.	GOOCH (1979) REPORTED 12 SPECIMENS FROM THIS LOCALITY. GOODRICH (1940) ALSO REPORTED SPECIMENS FROM THIS SITE.
TENNESSEE RIVER AT FLORENCE. ALONG SOUTH SHORE BELOW US HWY 72 BRIDGE.	ISOM, ET. AL. (1979) REPORTED SPECIMENS FROM THIS LOCALITY.
SHELL MOUND LOCATED AT SMITHSONIA LANDING. ON THE TENNESSEE RIVER BANK JUST SOUTH OF SMITHSONIA, APPROXIMATE RIVER MILE 242.0	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.
SHELL MIDDEN LOCATED ON THE SOUTH SIDE OF THE TENNESSEE RIVER AT THE MOUTH OF MULBERRY CREEK, ALABAMA. APPROXIMATE RIVER MILE 241.8	WEBB AND DEJARNETTE (1942) FOUND WEATHERED DEAD SHELLS DURING AN ARCHEOLOGICAL SHELL MIDDEN SURVEY.

Comments
SPEOPLATYRHINUS POULSONI (LE), MYOTIS GRIESCENS (LE) AND PROCAMBARUS (REMOTICAMBARUS) PECKI (AL SPCO) ARE ALSO PRESENT AT THIS LOCALITY.
APPARENTLY THESE SPECIMENS MAY REPRESENT AN ENTIRELY NEW, UNDESCRIBED SPECIES IF NOT ALABAMA CAVE SHRIMP.
APPARENTLY THESE SPECIMENS MAY REPRESENT AN ENTIRELY NEW, UNDESCRIBED SPECIES IF NOT ALABAMA CAVE SHRIMP.
COOPER ALSO REPORTED GYRINOPHILUS PALLEUCUS AND TYPHLICHTHYS SUBTERRANEUS ALSO PRESENT AT THIS LOCALITY.
COOPER ALSO REPORTED MYOTIS GRIESCENS, SPEOPLATYRHINUS POULSONI AND CAMBARUS (AVITICAMBARUS) JONESI PRESENT AT THIS LOCALITY.
JENKINS AND BURKHEAD (1984) MENTION THAT LOCALITY HAS APPARENTLY NOT BEEN RECOLLECTED. ONLY CHANGE AFFECTING STREAM SINCE 1937 IS IMPOUNDMENT AT MOUTH IN 1938. THEY SPECULATE ON POSSIBILITY OF HYPOTHETICAL PARENT POPULATION IN MUSCLE SHOALS

UNSURE # OF VOUCHER SPECIMENS IN EACH OF KUHAJDA AND MAYDEN'S COLLECTIONS, PRESUMABLY FEWER NUMBERS OF VOUCHER SPECIMENS KEPT AND REMAINDER OF COLLECTION RELEASED.
THIS IS ONLY KNOWN LOCALITY FOR SPECIES. MAYDEN ET AL. ALSO OBSERVED A SOUTHERN CAVEFISH, TYPHLICHTHYES SUBTERRANEOUS (EOR # 088)IN FEB. 1995. THIS IS FIRST KNOWN OCCURRENCE OF THIS SPECIES AT THIS LOCALITY. KUHAJDA AND MAYDEN (1996) REPORT
THE SPECIES IS SYMPATRIC WITH ALABAMA CAVEFISH (FEDERALLY ENDANGERED), SPEOPLATYRINUS POULSONI (EOR #001) IN KEY CAVE.
COOPER REPORTED GYRINOPHILUS PALLEUCUS AND PROCAMBRUS PECKI ALSO PRESENT.
COOPER REPORTED THAT WESTERN MOST POPULATION OF GYRINOPHILUS PALLEUCUS ALSO OCCURS IN THIS CAVE.
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27

CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5

CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5

CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
WILLIAMS ET AL. (1993) LISTED THE SPECIES AS ENDANGERED, POSSIBLY EXTINCT. PARMALEE & BOGAN (1998) ALSO NOTED THAT 'THE CUMBERLAND LEAFSHELL HAS NOT BEEN COLLECTED IN OVER 70 YEARS AND IS PRESUMED EXTINCT.'
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
A USFWS FINAL RULE (2001) DESIGNATED E. TORULOSA TORULOSA AS A NONESSENTIAL EXPERIMENTAL POPULATION (NEP) ON JUNE 14, 2001; TO BE REINTRODUCED IN THE REMAINING FREE-FLOWING REACH (~12 MILES) OF THE TN RIVER BETWEEN WILSON DAM AND BACKWATERS
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27

EXACT LOCALITY OF EARLIER RECORDS UNKNOWN.

EXACT DATE OF RICHARDSON'S SURVEYS UNSPECIFIED, BUT HIS STUDY BEGAN OCTOBER 1992 AND IS CONTINUING TO PRESENT (OCTOBER 1993).

RICHARDSON (1993) ALSO REPORTED ZEBRA MUSSELS FROM HERE (ATTACHED TO NATIVE MUSSELS).
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5

CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27

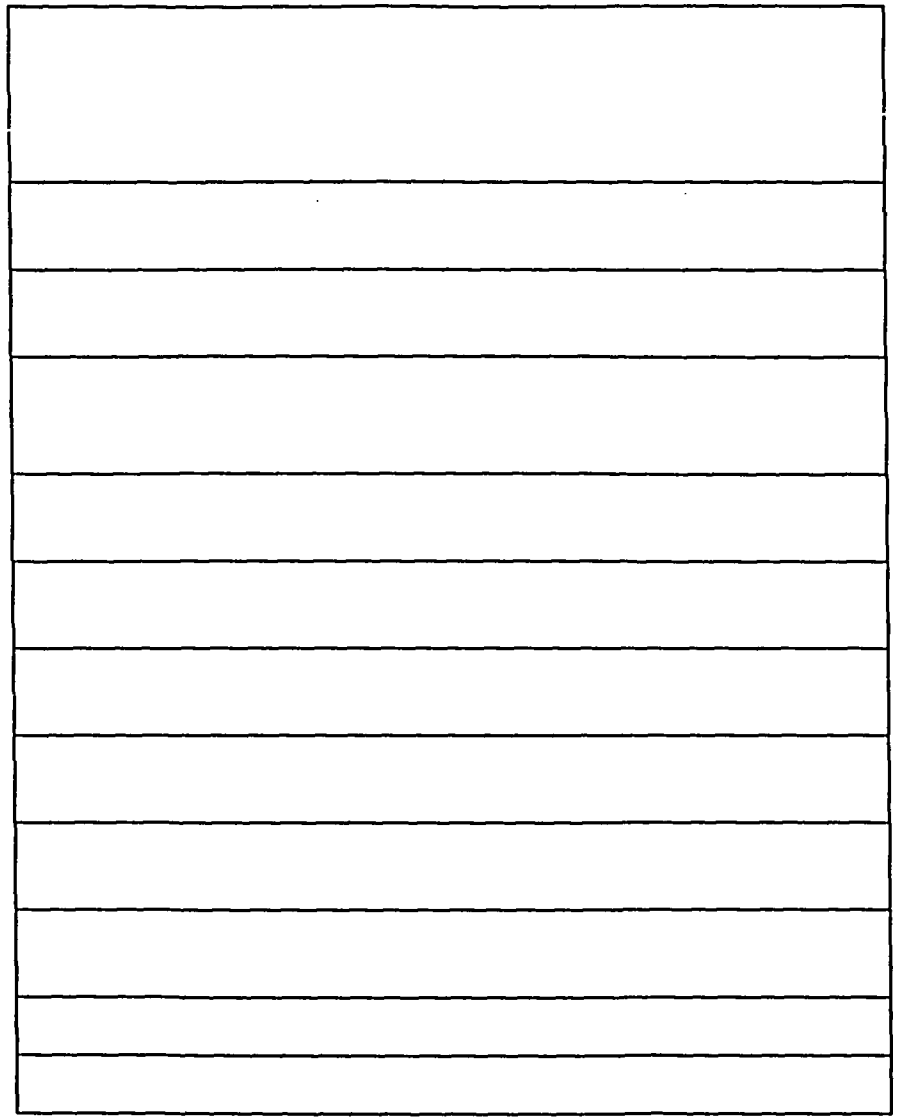
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
NO COLLECTION DATE ON RECORD
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27

CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
A USFWS FINAL RULE (2001) DESIGNATING P. CLAVA A NONESSENTIAL EXPERIMENTAL POPULATION (NEP) WAS ANNOUNCED JUNE 14, 2001; SPECIES WILL BE REINTRODUCED IN THE REMAINING FREE-FLOWING REACH (~12 MILES) OF THE TN RIVER BETWEEN WILSON DAM AND THE
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5

CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
SPECIMEN FOUND IN 1998 AND REPORTED BY GARNER WAS PHOTOGRAPHED, AND IS AWAITING CONFIRMATION.

CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27

CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
EXTIRPATED FROM MAINSTREAM OF TENNESSEE RIVER
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27



CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5

CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
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CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5

CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 5
CORRESPONDS WITH WEBB AND DEJARNETTE'S SITE NUMBER 27

ATTACHMENT 3

Wheeler Reservoir Profiles Taken 1990 - 2005

At

Locations: TRM 277.0 (Wheeler Dam Forebay) &

TRM 295.9 (Transition Zone)

Station ID	Reservoir Name	River Mile	Sample Location	Date	Time (C)	Temp degC	pH	SpCond uS/cm	DO %Sat	DO mg/l	Depth meters
WEHFB	Wheeler	TRM 277	Forebay	01/30/1990	11:55:00	9.1	7.6	151		11.7	0.3
WEHFB	Wheeler	TRM 277	Forebay	01/30/1990	11:57:00	9.1	7.5	151		11.5	1.5
WEHFB	Wheeler	TRM 277	Forebay	01/30/1990	11:59:00	9	7.5	150		11.3	4
WEHFB	Wheeler	TRM 277	Forebay	01/30/1990	12:01:00	9	7.5	151		11.3	6
WEHFB	Wheeler	TRM 277	Forebay	01/30/1990	12:03:00	9	7.5	152		11.3	8
WEHFB	Wheeler	TRM 277	Forebay	01/30/1990	12:05:00	9	7.5	152		11.3	10
WEHFB	Wheeler	TRM 277	Forebay	01/30/1990	12:07:00	9	7.5	151		11.2	12
WEHFB	Wheeler	TRM 277	Forebay	01/30/1990	12:09:00	9	7.5	154		11.3	13
WEHFB	Wheeler	TRM 277	Forebay	04/24/1990	12:10:00	21.2	8.9	148		12.1	0.3
WEHFB	Wheeler	TRM 277	Forebay	04/24/1990	12:11:00	19.3	8.8	143		11.5	1.5
WEHFB	Wheeler	TRM 277	Forebay	04/24/1990	12:12:00	17.8	8.6	160		10.3	4
WEHFB	Wheeler	TRM 277	Forebay	04/24/1990	12:15:00	16.8	8.5	158		9.5	6
WEHFB	Wheeler	TRM 277	Forebay	04/24/1990	12:17:00	16.5	8.4	161		8.9	8
WEHFB	Wheeler	TRM 277	Forebay	04/24/1990	12:19:00	16.4	8.4	159		8.8	10
WEHFB	Wheeler	TRM 277	Forebay	04/24/1990	12:21:00	16.1	8.3	157		8.5	12
WEHFB	Wheeler	TRM 277	Forebay	04/24/1990	12:23:00	15.8	8	154		8.4	13
WEHFB	Wheeler	TRM 277	Forebay	05/22/1990	10:35:00	21.8	7.8	160		7.6	0.3
WEHFB	Wheeler	TRM 277	Forebay	05/22/1990	10:38:00	21.8	7.8	160		7.5	1.5
WEHFB	Wheeler	TRM 277	Forebay	05/22/1990	10:39:00	21.8	7.8	160		7.5	4
WEHFB	Wheeler	TRM 277	Forebay	05/22/1990	10:42:00	21.8	7.8	161		7.5	6
WEHFB	Wheeler	TRM 277	Forebay	05/22/1990	10:44:00	21.8	7.8	161		7.4	8
WEHFB	Wheeler	TRM 277	Forebay	05/22/1990	10:46:00	21.8	7.7	161		7.4	10
WEHFB	Wheeler	TRM 277	Forebay	05/22/1990	10:48:00	21.9	7.7	162		7.4	12
WEHFB	Wheeler	TRM 277	Forebay	05/22/1990	10:50:00	21.9	7.7	162		7.3	13
WEHFB	Wheeler	TRM 277	Forebay	06/27/1990	10:50:00	28.3	8.7	151		10.4	0.3
WEHFB	Wheeler	TRM 277	Forebay	06/27/1990	10:53:00	27.9	8.8	150		10.7	1.5
WEHFB	Wheeler	TRM 277	Forebay	06/27/1990	10:54:00	27.6	8.4	148		8.4	4
WEHFB	Wheeler	TRM 277	Forebay	06/27/1990	10:57:00	27.3	7.8	150		6.3	5
WEHFB	Wheeler	TRM 277	Forebay	06/27/1990	10:58:00	27.2	7.6	150		6	6
WEHFB	Wheeler	TRM 277	Forebay	06/27/1990	10:59:00	27.2	7.5	150		5.7	7
WEHFB	Wheeler	TRM 277	Forebay	06/27/1990	11:00:00	27.2	7.5	149		5.7	8
WEHFB	Wheeler	TRM 277	Forebay	06/27/1990	11:02:00	27.1	7.5	149		5.7	9
WEHFB	Wheeler	TRM 277	Forebay	06/27/1990	11:04:00	27.1	7.4	145		5.6	10
WEHFB	Wheeler	TRM 277	Forebay	06/27/1990	11:06:00	27.1	7.4	143		5.6	11.8
WEHFB	Wheeler	TRM 277	Forebay	07/25/1990	10:52:00	28.5	8.7	166		10.1	0.3

WEHFB	Wheeler	TRM	277 Forebay	07/25/1990	10:55:00	28.4	8.7	165	10.1	1.5
WEHFB	Wheeler	TRM	277 Forebay	07/25/1990	10:56:00	28.3	8.6	162	9.8	2
WEHFB	Wheeler	TRM	277 Forebay	07/25/1990	10:57:00	28.1	8.4	162	8.8	3
WEHFB	Wheeler	TRM	277 Forebay	07/25/1990	10:58:00	28	8.3	160	8.4	4
WEHFB	Wheeler	TRM	277 Forebay	07/25/1990	11:01:00	27.8	8	159	7.6	6
WEHFB	Wheeler	TRM	277 Forebay	07/25/1990	11:03:00	27.8	7.8	158	7.3	8
WEHFB	Wheeler	TRM	277 Forebay	07/25/1990	11:05:00	27.7	7.7	154	6.9	10
WEHFB	Wheeler	TRM	277 Forebay	07/25/1990	11:07:00	27.7	7.4	150	6.7	11
WEHFB	Wheeler	TRM	277 Forebay	08/29/1990	9:05:00	29.8	8.3	165	9.4	0.3
WEHFB	Wheeler	TRM	277 Forebay	08/29/1990	9:07:00	29.8	8.3	164	9.3	1.5
WEHFB	Wheeler	TRM	277 Forebay	08/29/1990	9:08:00	29.7	8.2	162	8.9	3.5
WEHFB	Wheeler	TRM	277 Forebay	08/29/1990	9:09:00	29.4	7.6	163	7.5	4
WEHFB	Wheeler	TRM	277 Forebay	08/29/1990	9:11:00	28.7	7.2	163	5.2	5
WEHFB	Wheeler	TRM	277 Forebay	08/29/1990	9:12:00	28.7	7.3	162	5.1	6
WEHFB	Wheeler	TRM	277 Forebay	08/29/1990	9:13:00	28.5	7.1	161	4.8	8
WEHFB	Wheeler	TRM	277 Forebay	08/29/1990	9:14:00	28.5	7	160	4.6	10
WEHFB	Wheeler	TRM	277 Forebay	08/29/1990	9:16:00	28.4	6.9	158	4.3	12
WEHFB	Wheeler	TRM	277 Forebay	09/26/1990	8:45:00	23.9	7.8	185	6.9	0.3
WEHFB	Wheeler	TRM	277 Forebay	09/26/1990	8:47:00	24	7.8	183	6.8	1.5
WEHFB	Wheeler	TRM	277 Forebay	09/26/1990	8:48:00	24	7.8	182	6.8	4
WEHFB	Wheeler	TRM	277 Forebay	09/26/1990	8:50:00	24.1	7.8	180	6.8	6
WEHFB	Wheeler	TRM	277 Forebay	09/26/1990	8:52:00	24.1	7.8	176	6.8	8
WEHFB	Wheeler	TRM	277 Forebay	09/26/1990	8:54:00	24.1	7.8	174	6.8	10
WEHFB	Wheeler	TRM	277 Forebay	09/26/1990	8:56:00	24.1	7.8	173	6.8	10.4
WEHFB	Wheeler	TRM	277 Forebay	01/29/1991	8:35:00	7	7.6	188	10.8	0.3
WEHFB	Wheeler	TRM	277 Forebay	01/29/1991	8:37:00	7	7.7	186	10.7	1.5
WEHFB	Wheeler	TRM	277 Forebay	01/29/1991	8:38:00	7	7.7	185	10.6	4
WEHFB	Wheeler	TRM	277 Forebay	01/29/1991	8:41:00	7	7.7	181	10.6	6
WEHFB	Wheeler	TRM	277 Forebay	01/29/1991	8:42:00	7	7.8	179	10.6	8
WEHFB	Wheeler	TRM	277 Forebay	01/29/1991	8:44:00	7	7.8	173	10.6	10
WEHFB	Wheeler	TRM	277 Forebay	01/29/1991	8:46:00	7	7.8	173	10.5	10.8
WEHFB	Wheeler	TRM	277 Forebay	03/13/1991	8:30:00	10.4	7.74	148	10.7	0.3
WEHFB	Wheeler	TRM	277 Forebay	03/13/1991	8:32:00	10.4	7.69	146	10.7	1.5
WEHFB	Wheeler	TRM	277 Forebay	03/13/1991	8:34:00	10.4	7.65	143	10.7	4
WEHFB	Wheeler	TRM	277 Forebay	03/13/1991	8:37:00	10.4	7.63	140	10.7	6
WEHFB	Wheeler	TRM	277 Forebay	03/13/1991	8:40:00	10.4	7.61	140	10.7	8
WEHFB	Wheeler	TRM	277 Forebay	03/13/1991	8:42:00	10.4	7.6	138	10.7	10

WEHFB	Wheeler	TRM	277 Forebay	03/13/1991	8:44:00	10.3	7.59	133	10.6	12
WEHFB	Wheeler	TRM	277 Forebay	03/27/1991	7:50:00	16	7.81	145	10	0.3
WEHFB	Wheeler	TRM	277 Forebay	03/27/1991	7:52:00	15.9	7.81	144	9.6	1.5
WEHFB	Wheeler	TRM	277 Forebay	03/27/1991	7:54:00	15.9	7.77	140	9.6	4
WEHFB	Wheeler	TRM	277 Forebay	03/27/1991	7:56:00	15.9	7.77	139	9.6	6
WEHFB	Wheeler	TRM	277 Forebay	03/27/1991	7:58:00	15.6	7.77	139	9.7	8
WEHFB	Wheeler	TRM	277 Forebay	03/27/1991	8:00:00	15.4	7.75	138	9.8	10
WEHFB	Wheeler	TRM	277 Forebay	03/27/1991	8:02:00	15.3	7.74	135	9.8	12
WEHFB	Wheeler	TRM	277 Forebay	04/09/1991	8:30:00	17.4	7.98	151	11.2	0.5
WEHFB	Wheeler	TRM	277 Forebay	04/09/1991	8:32:00	17.3	7.96	151	11.1	1.5
WEHFB	Wheeler	TRM	277 Forebay	04/09/1991	8:34:00	17.1	7.83	153	10.7	4
WEHFB	Wheeler	TRM	277 Forebay	04/09/1991	8:36:00	16.5	7.7	154	10.3	6
WEHFB	Wheeler	TRM	277 Forebay	04/09/1991	8:38:00	16.1	7.62	162	10.2	8
WEHFB	Wheeler	TRM	277 Forebay	04/09/1991	8:40:00	15.4	7.54	149	9.6	10
WEHFB	Wheeler	TRM	277 Forebay	04/09/1991	8:42:00	15.3	7.52	152	9.8	12
WEHFB	Wheeler	TRM	277 Forebay	04/09/1991	8:44:00	15.2	7.51	154	9.6	13.2
WEHFB	Wheeler	TRM	277 Forebay	04/18/1991	8:00:00	19	7.49	147	7.9	0.5
WEHFB	Wheeler	TRM	277 Forebay	04/18/1991	8:02:00	18.9	7.46	148	7.6	1.5
WEHFB	Wheeler	TRM	277 Forebay	04/18/1991	8:04:00	18.7	7.43	148	7.5	4
WEHFB	Wheeler	TRM	277 Forebay	04/18/1991	8:06:00	18.5	7.42	152	7.5	6
WEHFB	Wheeler	TRM	277 Forebay	04/18/1991	8:08:00	18.3	7.41	150	7.4	8
WEHFB	Wheeler	TRM	277 Forebay	04/18/1991	8:10:00	18.3	7.41	149	7.4	10
WEHFB	Wheeler	TRM	277 Forebay	04/18/1991	8:12:00	18.3	7.4	149	7.4	12
WEHFB	Wheeler	TRM	277 Forebay	04/18/1991	8:14:00	18.2	7.39	147	7.3	13.7
WEHFB	Wheeler	TRM	277 Forebay	04/24/1991	8:10:00	18.3	7.65	152	7.9	0.5
WEHFB	Wheeler	TRM	277 Forebay	04/24/1991	8:12:00	18.3	7.64	152	7.9	1.5
WEHFB	Wheeler	TRM	277 Forebay	04/24/1991	8:14:00	18.3	7.63	153	7.9	4
WEHFB	Wheeler	TRM	277 Forebay	04/24/1991	8:16:00	18.3	7.61	155	7.9	6
WEHFB	Wheeler	TRM	277 Forebay	04/24/1991	8:18:00	17.9	7.63	164	7.8	8
WEHFB	Wheeler	TRM	277 Forebay	04/24/1991	8:20:00	17.8	7.61	167	7.9	10
WEHFB	Wheeler	TRM	277 Forebay	04/24/1991	8:22:00	17.8	7.6	168	7.8	12
WEHFB	Wheeler	TRM	277 Forebay	04/24/1991	8:24:00	17.8	7.6	169	7.8	13.3
WEHFB	Wheeler	TRM	277 Forebay	05/08/1991	8:00:00	20.2	7.59	145	7.8	0.5
WEHFB	Wheeler	TRM	277 Forebay	05/08/1991	8:02:00	20.2	7.59	145	7.8	1.5
WEHFB	Wheeler	TRM	277 Forebay	05/08/1991	8:04:00	20.2	7.58	146	7.8	4
WEHFB	Wheeler	TRM	277 Forebay	05/08/1991	8:06:00	20	7.56	147	7.6	6
WEHFB	Wheeler	TRM	277 Forebay	05/08/1991	8:08:00	20	7.53	147	7.5	8

WEHFB	Wheeler	TRM	277 Forebay	05/08/1991	8:10:00	20	7.51	146	7.5	10
WEHFB	Wheeler	TRM	277 Forebay	05/08/1991	8:12:00	20	7.5	145	7.5	12
WEHFB	Wheeler	TRM	277 Forebay	05/08/1991	8:14:00	20	7.5	145	7.5	12.2
WEHFB	Wheeler	TRM	277 Forebay	05/14/1991	10:30:00	21.2	7.46	153	8	0.5
WEHFB	Wheeler	TRM	277 Forebay	05/14/1991	10:31:00	21	7.47	155	7.4	1.5
WEHFB	Wheeler	TRM	277 Forebay	05/14/1991	10:32:00	21	7.45	155	7.4	4
WEHFB	Wheeler	TRM	277 Forebay	05/14/1991	10:34:00	20.8	7.43	156	7.2	6
WEHFB	Wheeler	TRM	277 Forebay	05/14/1991	10:36:00	20.8	7.43	154	7.2	8
WEHFB	Wheeler	TRM	277 Forebay	05/14/1991	10:38:00	20.8	7.43	154	7.2	10
WEHFB	Wheeler	TRM	277 Forebay	05/14/1991	10:40:00	19.2	6.35	196	7.4	12
WEHFB	Wheeler	TRM	277 Forebay	05/21/1991	13:20:00	24.1	7.73	155	8.1	0.5
WEHFB	Wheeler	TRM	277 Forebay	05/21/1991	13:22:00	24.1	7.73	156	8.1	1.5
WEHFB	Wheeler	TRM	277 Forebay	05/21/1991	13:24:00	23.7	7.66	156	7.6	4
WEHFB	Wheeler	TRM	277 Forebay	05/21/1991	13:26:00	23.5	7.62	159	7.5	6
WEHFB	Wheeler	TRM	277 Forebay	05/21/1991	13:29:00	23.2	7.57	166	7.2	8
WEHFB	Wheeler	TRM	277 Forebay	05/21/1991	13:31:00	23.1	7.52	161	7.1	10
WEHFB	Wheeler	TRM	277 Forebay	05/21/1991	13:33:00	23.1	7.48	163	7	12
WEHFB	Wheeler	TRM	277 Forebay	05/21/1991	13:35:00	22.2	7.41	164	4.2	14
WEHFB	Wheeler	TRM	277 Forebay	06/05/1991	10:10:00	27.7	8.32	149	8.4	0.5
WEHFB	Wheeler	TRM	277 Forebay	06/05/1991	10:11:00	27.6	8.23	149	8	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/05/1991	10:12:00	27.6	8.16	149	7.8	4
WEHFB	Wheeler	TRM	277 Forebay	06/05/1991	10:13:00	27.5	8.09	149	7.8	6
WEHFB	Wheeler	TRM	277 Forebay	06/05/1991	10:14:00	27.5	7.02	149	7.8	7
WEHFB	Wheeler	TRM	277 Forebay	06/05/1991	10:17:00	26.6	7.54	150	5.6	8
WEHFB	Wheeler	TRM	277 Forebay	06/05/1991	10:18:00	25.7	7.37	166	4.2	10
WEHFB	Wheeler	TRM	277 Forebay	06/05/1991	10:19:00	24.2	7.27	178	3.7	12
WEHFB	Wheeler	TRM	277 Forebay	06/05/1991	10:20:00	22.7	7.24	182	3.8	13.7
WEHFB	Wheeler	TRM	277 Forebay	06/11/1991	8:30:00	27.8	8.82	161	9.4	0.3
WEHFB	Wheeler	TRM	277 Forebay	06/11/1991	8:32:00	27.9	8.81	160	9.3	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/11/1991	8:34:00	27.9	8.75	161	9.2	4
WEHFB	Wheeler	TRM	277 Forebay	06/11/1991	8:36:00	27.6	8.52	163	8.5	6
WEHFB	Wheeler	TRM	277 Forebay	06/11/1991	8:38:00	27.4	8.3	164	7.7	8
WEHFB	Wheeler	TRM	277 Forebay	06/11/1991	8:40:00	27.2	7.92	170	6.4	10
WEHFB	Wheeler	TRM	277 Forebay	06/11/1991	8:42:00	26.1	7.63	187	4.5	12
WEHFB	Wheeler	TRM	277 Forebay	06/18/1991	10:45:00	28.8	8.84	160	10.4	0.3
WEHFB	Wheeler	TRM	277 Forebay	06/18/1991	10:47:00	28.6	8.89	160	10.2	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/18/1991	10:49:00	28.4	8.75	160	9.2	3

WEHFB	Wheeler	TRM	277 Forebay	06/18/1991	10:51:00	28.1	8.37	165	7.8	4
WEHFB	Wheeler	TRM	277 Forebay	06/18/1991	10:53:00	28	8.12	161	7.1	5
WEHFB	Wheeler	TRM	277 Forebay	06/18/1991	10:55:00	27.8	7.91	165	6.5	6
WEHFB	Wheeler	TRM	277 Forebay	06/18/1991	10:57:00	27.1	7.52	170	4.8	8
WEHFB	Wheeler	TRM	277 Forebay	06/18/1991	10:59:00	26.8	7.32	166	4.1	10
WEHFB	Wheeler	TRM	277 Forebay	06/18/1991	11:01:00	26.3	7.19	173	2.5	12
WEHFB	Wheeler	TRM	277 Forebay	07/02/1991	9:30:00	30.1	9.15	152	11.8	0.3
WEHFB	Wheeler	TRM	277 Forebay	07/02/1991	9:33:00	29.6	9.07	151	11.6	1.5
WEHFB	Wheeler	TRM	277 Forebay	07/02/1991	9:34:00	28.6	8.58	149	10.3	2
WEHFB	Wheeler	TRM	277 Forebay	07/02/1991	9:35:00	27.7	8.08	148	7.6	3
WEHFB	Wheeler	TRM	277 Forebay	07/02/1991	9:35:00	27.3	7.9	147	6.5	4
WEHFB	Wheeler	TRM	277 Forebay	07/02/1991	9:36:00	26.8	7.57	155	5.5	6
WEHFB	Wheeler	TRM	277 Forebay	07/02/1991	9:39:00	26.1	7.45	164	4.5	8
WEHFB	Wheeler	TRM	277 Forebay	07/02/1991	9:40:00	25.7	7.35	162	4.2	10
WEHFB	Wheeler	TRM	277 Forebay	07/02/1991	9:41:00	25.4	7.29	161	3.4	12
WEHFB	Wheeler	TRM	277 Forebay	07/16/1991	10:00:00	30	8.22	167	7.5	0.3
WEHFB	Wheeler	TRM	277 Forebay	07/16/1991	10:02:00	30	8.19	167	7.5	1.5
WEHFB	Wheeler	TRM	277 Forebay	07/16/1991	10:04:00	30	8.16	167	7.4	3
WEHFB	Wheeler	TRM	277 Forebay	07/16/1991	10:06:00	29.9	8.09	167	7.3	4
WEHFB	Wheeler	TRM	277 Forebay	07/16/1991	10:08:00	29.9	7.99	164	7.1	6
WEHFB	Wheeler	TRM	277 Forebay	07/16/1991	10:10:00	29.9	7.92	167	7	7
WEHFB	Wheeler	TRM	277 Forebay	07/16/1991	10:12:00	29.7	7.57	198	4.7	8
WEHFB	Wheeler	TRM	277 Forebay	07/16/1991	10:14:00	29.4	7.32	204	4.5	9
WEHFB	Wheeler	TRM	277 Forebay	07/16/1991	10:16:00	28.9	7.2	173	3.3	10
WEHFB	Wheeler	TRM	277 Forebay	07/16/1991	10:18:00	28.6	7.07	173	2.9	11
WEHFB	Wheeler	TRM	277 Forebay	07/16/1991	10:20:00	28.3	7	177	1.6	12
WEHFB	Wheeler	TRM	277 Forebay	07/16/1991	10:22:00	27.5	6.97	183	0.8	13.6
WEHFB	Wheeler	TRM	277 Forebay	07/22/1991	8:00:00	30.8	8.7	157	8.6	0.3
WEHFB	Wheeler	TRM	277 Forebay	07/22/1991	8:03:00	30.4	8.57	158	8.2	1.5
WEHFB	Wheeler	TRM	277 Forebay	07/22/1991	8:04:00	30.4	8.2	161	7.9	2
WEHFB	Wheeler	TRM	277 Forebay	07/22/1991	8:05:00	29.9	8.15	161	6.6	3
WEHFB	Wheeler	TRM	277 Forebay	07/22/1991	8:06:00	29.6	7.75	161	6.2	4
WEHFB	Wheeler	TRM	277 Forebay	07/22/1991	8:09:00	29.3	7.53	162	5	6
WEHFB	Wheeler	TRM	277 Forebay	07/22/1991	8:10:00	29.2	7.43	164	4.7	8
WEHFB	Wheeler	TRM	277 Forebay	07/22/1991	8:12:00	29.1	7.35	182	4.1	10
WEHFB	Wheeler	TRM	277 Forebay	07/22/1991	8:16:00	29	7.28	176	3.6	12
WEHFB	Wheeler	TRM	277 Forebay	07/22/1991	8:18:00	28.8	7.16	195	0.7	13.5

WEHFB	Wheeler	TRM	277 Forebay	07/30/1991	10:35:00	30.5	8.24	159	7.9	0.3
WEHFB	Wheeler	TRM	277 Forebay	07/30/1991	10:37:00	30.2	8.09	158	7.3	1.5
WEHFB	Wheeler	TRM	277 Forebay	07/30/1991	10:39:00	29.9	7.8	156	6.7	4
WEHFB	Wheeler	TRM	277 Forebay	07/30/1991	10:41:00	29.9	7.67	157	6.3	5
WEHFB	Wheeler	TRM	277 Forebay	07/30/1991	10:43:00	29.8	7.56	157	5.9	6
WEHFB	Wheeler	TRM	277 Forebay	07/30/1991	10:45:00	29.8	7.47	157	5.8	8
WEHFB	Wheeler	TRM	277 Forebay	07/30/1991	10:47:00	29.7	7.4	153	5.6	10
WEHFB	Wheeler	TRM	277 Forebay	07/30/1991	10:49:00	29.6	7.32	157	5	11
WEHFB	Wheeler	TRM	277 Forebay	07/30/1991	10:51:00	29.5	7.28	162	4.3	12
WEHFB	Wheeler	TRM	277 Forebay	07/30/1991	10:53:00	29.4	7.25	163	4	13
WEHFB	Wheeler	TRM	277 Forebay	07/30/1991	10:55:00	29.3	7.22	165	3.9	14
WEHFB	Wheeler	TRM	277 Forebay	07/30/1991	10:57:00	27.8	7.16	196	0.1	14.7
WEHFB	Wheeler	TRM	277 Forebay	08/13/1991	8:15:00	29.4	7.58	159	6.3	0.3
WEHFB	Wheeler	TRM	277 Forebay	08/13/1991	8:17:00	29.5	7.59	157	6.3	1.5
WEHFB	Wheeler	TRM	277 Forebay	08/13/1991	8:19:00	29.5	7.57	160	6.3	3
WEHFB	Wheeler	TRM	277 Forebay	08/13/1991	8:21:00	29.5	7.57	159	6.3	4
WEHFB	Wheeler	TRM	277 Forebay	08/13/1991	8:23:00	29.5	7.56	159	6.3	6
WEHFB	Wheeler	TRM	277 Forebay	08/13/1991	8:25:00	29.5	7.55	161	6.3	8
WEHFB	Wheeler	TRM	277 Forebay	08/13/1991	8:27:00	29.5	7.54	159	6.3	10
WEHFB	Wheeler	TRM	277 Forebay	08/13/1991	8:29:00	29.5	7.53	155	6.3	12
WEHFB	Wheeler	TRM	277 Forebay	08/13/1991	8:31:00	29.5	7.53	160	6.2	14
WEHFB	Wheeler	TRM	277 Forebay	08/21/1991	9:50:00	28.6	7.7	164	7.1	0.5
WEHFB	Wheeler	TRM	277 Forebay	08/21/1991	9:52:00	28.5	7.68	165	7	1.5
WEHFB	Wheeler	TRM	277 Forebay	08/21/1991	9:54:00	28.5	7.62	165	6.8	4
WEHFB	Wheeler	TRM	277 Forebay	08/21/1991	9:56:00	28.5	7.6	165	6.8	6
WEHFB	Wheeler	TRM	277 Forebay	08/21/1991	9:58:00	28.5	7.58	165	6.7	8
WEHFB	Wheeler	TRM	277 Forebay	08/21/1991	10:00:00	28.5	7.55	165	6.6	10
WEHFB	Wheeler	TRM	277 Forebay	08/21/1991	10:04:00	28.5	7.54	165	6.6	12
WEHFB	Wheeler	TRM	277 Forebay	08/21/1991	10:06:00	28.4	7.53	161	6.5	13
WEHFB	Wheeler	TRM	277 Forebay	08/27/1991	10:10:00	27.9	7.41	173	5.7	0.3
WEHFB	Wheeler	TRM	277 Forebay	08/27/1991	10:12:00	27.9	7.39	173	5.7	1.5
WEHFB	Wheeler	TRM	277 Forebay	08/27/1991	10:14:00	27.9	7.37	173	5.7	4
WEHFB	Wheeler	TRM	277 Forebay	08/27/1991	10:16:00	27.8	7.36	174	5.6	6
WEHFB	Wheeler	TRM	277 Forebay	08/27/1991	10:18:00	27.8	7.35	174	5.7	8
WEHFB	Wheeler	TRM	277 Forebay	08/27/1991	10:20:00	27.8	7.34	174	5.7	10
WEHFB	Wheeler	TRM	277 Forebay	08/27/1991	10:22:00	27.8	7.35	175	5.8	12
WEHFB	Wheeler	TRM	277 Forebay	08/27/1991	10:24:00	27.8	7.35	175	5.8	12.6

WEHFB	Wheeler	TRM	277 Forebay	09/10/1991	10:46:00	27.9	7.79	182	6.7	0.3
WEHFB	Wheeler	TRM	277 Forebay	09/10/1991	10:48:00	28	7.71	182	6.6	1.5
WEHFB	Wheeler	TRM	277 Forebay	09/10/1991	10:50:00	27.9	7.61	181	6.2	4
WEHFB	Wheeler	TRM	277 Forebay	09/10/1991	10:52:00	27.9	7.52	180	6	6
WEHFB	Wheeler	TRM	277 Forebay	09/10/1991	10:54:00	27.9	7.5	181	5.9	8
WEHFB	Wheeler	TRM	277 Forebay	09/10/1991	10:56:00	27.9	7.48	181	5.9	10
WEHFB	Wheeler	TRM	277 Forebay	09/10/1991	10:58:00	27.9	7.46	184	5.9	12
WEHFB	Wheeler	TRM	277 Forebay	09/18/1991	10:15:00	30.2	8.84	191	10.1	0.5
WEHFB	Wheeler	TRM	277 Forebay	09/18/1991	10:18:00	30	8.78	190	9.9	1.5
WEHFB	Wheeler	TRM	277 Forebay	09/18/1991	10:19:00	30	8.7	191	8.7	2
WEHFB	Wheeler	TRM	277 Forebay	09/18/1991	10:20:00	29.6	8.18	190	7.9	3
WEHFB	Wheeler	TRM	277 Forebay	09/18/1991	10:21:00	29.4	7.82	192	6.8	4
WEHFB	Wheeler	TRM	277 Forebay	09/18/1991	10:24:00	29.2	7.4	196	4.7	5
WEHFB	Wheeler	TRM	277 Forebay	09/18/1991	10:25:00	29.2	7.35	194	4.6	6
WEHFB	Wheeler	TRM	277 Forebay	09/18/1991	10:26:00	29.2	7.3	195	4.5	8
WEHFB	Wheeler	TRM	277 Forebay	09/18/1991	10:27:00	29	7.26	195	4.2	9
WEHFB	Wheeler	TRM	277 Forebay	09/18/1991	10:28:00	28.8	7.18	211	2.7	10
WEHFB	Wheeler	TRM	277 Forebay	09/18/1991	10:32:00	28.1	7.09	207	1.7	12
WEHFB	Wheeler	TRM	277 Forebay	09/18/1991	10:33:00	28	7.05	206	1.4	12.6
WEHFB	Wheeler	TRM	277 Forebay	01/24/1992	8:05:00	6.5	7.87	157	11.1	0.3
WEHFB	Wheeler	TRM	277 Forebay	01/24/1992	8:06:00	6.6	7.87	157	11.1	1.5
WEHFB	Wheeler	TRM	277 Forebay	01/24/1992	8:07:00	6.6	7.87	157	11.1	4
WEHFB	Wheeler	TRM	277 Forebay	01/24/1992	8:09:00	6.6	7.85	157	11.1	6
WEHFB	Wheeler	TRM	277 Forebay	01/24/1992	8:10:00	6.6	7.85	157	11.1	8
WEHFB	Wheeler	TRM	277 Forebay	01/24/1992	8:11:00	6.6	7.85	157	11.1	10
WEHFB	Wheeler	TRM	277 Forebay	01/24/1992	8:12:00	6.6	7.83	158	11.1	12
WEHFB	Wheeler	TRM	277 Forebay	01/24/1992	8:13:00	6.6	7.83	158	11.1	14
WEHFB	Wheeler	TRM	277 Forebay	01/24/1992	8:14:00	6.6	7.83	158	11	16
WEHFB	Wheeler	TRM	277 Forebay	04/22/1992	9:30:00	19.3	8.39	169	8.9	0.3
WEHFB	Wheeler	TRM	277 Forebay	04/22/1992	9:31:00	19.2	8.39	170	8.8	1.5
WEHFB	Wheeler	TRM	277 Forebay	04/22/1992	9:32:00	19.1	8.35	168	8.6	4
WEHFB	Wheeler	TRM	277 Forebay	04/22/1992	9:34:00	19.1	8.32	169	8.6	6
WEHFB	Wheeler	TRM	277 Forebay	04/22/1992	9:35:00	19.1	8.29	169	8.5	8
WEHFB	Wheeler	TRM	277 Forebay	04/22/1992	9:36:00	18.6	8.05	176	8.2	9
WEHFB	Wheeler	TRM	277 Forebay	04/22/1992	9:37:00	17.3	7.65	191	7.5	10
WEHFB	Wheeler	TRM	277 Forebay	04/22/1992	9:38:00	16.8	7.55	194	7.4	11
WEHFB	Wheeler	TRM	277 Forebay	04/22/1992	9:39:00	16.4	7.48	192	7	12.1

WEHFB	Wheeler	TRM	277 Forebay	05/20/1992	10:00:00	24.2	8.81	153		10.8	0.3
WEHFB	Wheeler	TRM	277 Forebay	05/20/1992	10:01:00	24.2	8.79	153		10.8	1.5
WEHFB	Wheeler	TRM	277 Forebay	05/20/1992	10:02:00	24.1	8.73	153		10.6	4
WEHFB	Wheeler	TRM	277 Forebay	05/20/1992	10:04:00	24	8.65	153		10.5	6
WEHFB	Wheeler	TRM	277 Forebay	05/20/1992	10:05:00	23.5	8.31	154		9.5	7
WEHFB	Wheeler	TRM	277 Forebay	05/20/1992	10:06:00	23.3	7.84	155		8.8	8
WEHFB	Wheeler	TRM	277 Forebay	05/20/1992	10:08:00	22.6	7.75	156		8.1	10
WEHFB	Wheeler	TRM	277 Forebay	05/20/1992	10:09:00	22	7.57	154		7.4	11
WEHFB	Wheeler	TRM	277 Forebay	05/20/1992	10:10:00	20.7	7.35	167		5	12
WEHFB	Wheeler	TRM	277 Forebay	06/17/1992	9:45:00	26.9	8.48	163		10.6	0.3
WEHFB	Wheeler	TRM	277 Forebay	06/17/1992	9:46:00	26.9	8.48	164		10.6	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/17/1992	9:47:00	26.1	7.7	166		8.4	4
WEHFB	Wheeler	TRM	277 Forebay	06/17/1992	9:49:00	25.7	7.5	166		7.9	6
WEHFB	Wheeler	TRM	277 Forebay	06/17/1992	9:50:00	24.7	7.22	165		6.5	8
WEHFB	Wheeler	TRM	277 Forebay	06/17/1992	9:51:00	24.3	7.09	167		5.3	9.6
WEHFB	Wheeler	TRM	277 Forebay	06/17/1992	9:52:00	24	7.03	167		4.7	10
WEHFB	Wheeler	TRM	277 Forebay	06/17/1992	9:53:00	23.8	7	169		4.7	12
WEHFB	Wheeler	TRM	277 Forebay	06/17/1992	9:54:00	23.7	6.99	170		3.7	12.6
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:28:00	28.6				11.6	0.3
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:28:00	28.2				10.9	1
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:28:00	27.9				9.4	2
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:29:00	27.5				7.3	3
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:29:00	27.3				7	4.1
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:30:00	27.3				6.7	5.1
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:31:00	27.3				6.5	6
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:32:00	27.3				6.5	7
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:32:00	27.2				6.2	8
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:33:00	27.2				6.2	9
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:33:00	27.2				6.3	10.1
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:34:00	27.1				5.8	10.9
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:34:00	27.1				5.6	12
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:35:00	27				5.5	13
WEHFB	Wheeler	TRM	277 Forebay	07/07/1992	9:36:00	26.6				3.7	14
WEHFB	Wheeler	TRM	277 Forebay	07/22/1992	10:26:00	29.7	8.9	159		9.7	0.3
WEHFB	Wheeler	TRM	277 Forebay	07/22/1992	10:29:00	29.6	8.87	159		9.5	1.5
WEHFB	Wheeler	TRM	277 Forebay	07/22/1992	10:30:00	29.4	8.53	159		8.3	4
WEHFB	Wheeler	TRM	277 Forebay	07/22/1992	10:34:00	29.2	8.22	160		7.6	6

WEHFB	Wheeler	TRM	277	Forebay	07/22/1992	10:35:00	28.3	7.28	177	4.6	8
WEHFB	Wheeler	TRM	277	Forebay	07/22/1992	10:36:00	28.2	7.15	173	4.3	10
WEHFB	Wheeler	TRM	277	Forebay	07/22/1992	10:37:00	28.1	7	176	3.7	11.5
WEHFB	Wheeler	TRM	277	Forebay	07/22/1992	10:40:00	28.1	7.05	175	3.6	12
WEHFB	Wheeler	TRM	277	Forebay	07/22/1992	10:41:00	28	6.99	182	2.9	14
WEHFB	Wheeler	TRM	277	Forebay	07/22/1992	10:42:00	27.8	6.95	189	1.4	14.5
WEHFB	Wheeler	TRM	277	Forebay	08/19/1992	9:23:00	27.4	7.54	162	6.9	0.3
WEHFB	Wheeler	TRM	277	Forebay	08/19/1992	9:24:00	27.4	7.54	162	7	1.5
WEHFB	Wheeler	TRM	277	Forebay	08/19/1992	9:25:00	27.4	7.42	163	6.3	4
WEHFB	Wheeler	TRM	277	Forebay	08/19/1992	9:26:00	27.4	7.39	164	6.2	6
WEHFB	Wheeler	TRM	277	Forebay	08/19/1992	9:27:00	27.4	7.37	161	6.1	8
WEHFB	Wheeler	TRM	277	Forebay	08/19/1992	9:28:00	27.4	7.35	164	6.1	9
WEHFB	Wheeler	TRM	277	Forebay	08/19/1992	9:29:00	27.4	7.37	161	6.1	10
WEHFB	Wheeler	TRM	277	Forebay	08/19/1992	9:30:00	27.4	7.36	164	6.1	11.8
WEHFB	Wheeler	TRM	277	Forebay	09/23/1992	10:14:00	25.6	7.71	201	6.4	0.3
WEHFB	Wheeler	TRM	277	Forebay	09/23/1992	10:15:00	25.6	7.71	202	6.4	1.5
WEHFB	Wheeler	TRM	277	Forebay	09/23/1992	10:16:00	25.7	7.7	201	6.4	4
WEHFB	Wheeler	TRM	277	Forebay	09/23/1992	10:17:00	25.7	7.7	203	6.4	6
WEHFB	Wheeler	TRM	277	Forebay	09/23/1992	10:18:00	25.7	7.7	205	6.5	8
WEHFB	Wheeler	TRM	277	Forebay	09/23/1992	10:19:00	25.7	7.67	204	6.4	8.4
WEHFB	Wheeler	TRM	277	Forebay	09/23/1992	10:20:00	25.7	7.68	206	6.4	10
WEHFB	Wheeler	TRM	277	Forebay	09/23/1992	10:21:00	25.7	7.67	203	6.4	11.4
WEHFB	Wheeler	TRM	277	Forebay	04/14/1993	12:36:00	17.3	8.71	149	12.3	0.3
WEHFB	Wheeler	TRM	277	Forebay	04/14/1993	12:37:00	16.7	8.56	149	11.6	1.5
WEHFB	Wheeler	TRM	277	Forebay	04/14/1993	12:38:00	16.6	8.33	150	10.9	4
WEHFB	Wheeler	TRM	277	Forebay	04/14/1993	12:40:00	16.4	8.17	150	10.6	6
WEHFB	Wheeler	TRM	277	Forebay	04/14/1993	12:41:00	15.1	7.91	150	9.7	8
WEHFB	Wheeler	TRM	277	Forebay	04/14/1993	12:42:00	14.6	7.71	151	9.3	10
WEHFB	Wheeler	TRM	277	Forebay	04/14/1993	12:43:00	14.4	7.59	152	9.1	11
WEHFB	Wheeler	TRM	277	Forebay	04/14/1993	12:44:00	14.2	7.67	151	9	12
WEHFB	Wheeler	TRM	277	Forebay	05/12/1993	13:39:00	23.8	8.42	149	10.3	0.3
WEHFB	Wheeler	TRM	277	Forebay	05/12/1993	13:42:00	21.5	8.02	148	8.7	1.5
WEHFB	Wheeler	TRM	277	Forebay	05/12/1993	13:43:00	21.2	7.74	147	7.6	3
WEHFB	Wheeler	TRM	277	Forebay	05/12/1993	13:44:00	21.2	7.6	148	7.8	4
WEHFB	Wheeler	TRM	277	Forebay	05/12/1993	13:48:00	21.1	7.53	147	7.6	6
WEHFB	Wheeler	TRM	277	Forebay	05/12/1993	13:49:00	20.2	7.43	162	6.6	8
WEHFB	Wheeler	TRM	277	Forebay	05/12/1993	13:50:00	19.9	7.29	182	6.2	9.6

WEHFB	Wheeler	TRM	277 Forebay	05/12/1993	13:53:00	19.9	7.36	177	6.3	10
WEHFB	Wheeler	TRM	277 Forebay	05/12/1993	13:54:00	19.6	7.33	171	6.1	12
WEHFB	Wheeler	TRM	277 Forebay	05/12/1993	13:55:00	19.4	7.31	182	5.9	12.6
WEHFB	Wheeler	TRM	277 Forebay	06/16/1993	14:05:00	29.8	8.77	165	10.4	0.3
WEHFB	Wheeler	TRM	277 Forebay	06/16/1993	14:06:00	28.8	8.85	165	11	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/16/1993	14:08:00	28.5	8.81	165	10.8	2.8
WEHFB	Wheeler	TRM	277 Forebay	06/16/1993	14:09:00	28.2	8.64	166	9.7	4
WEHFB	Wheeler	TRM	277 Forebay	06/16/1993	14:10:00	27.9	8.38	169	8.8	6
WEHFB	Wheeler	TRM	277 Forebay	06/16/1993	14:12:00	27.8	8.25	170	8.5	7
WEHFB	Wheeler	TRM	277 Forebay	06/16/1993	14:13:00	27.6	7.98	169	7.4	8
WEHFB	Wheeler	TRM	277 Forebay	06/16/1993	14:14:00	27.1	7.52	178	5.7	9
WEHFB	Wheeler	TRM	277 Forebay	06/16/1993	14:15:00	27	7.17	183	5.4	9.7
WEHFB	Wheeler	TRM	277 Forebay	06/16/1993	14:16:00	27	7.42	187	5.5	10
WEHFB	Wheeler	TRM	277 Forebay	06/16/1993	14:17:00	26.8	7.28	186	5.1	11
WEHFB	Wheeler	TRM	277 Forebay	06/16/1993	14:18:00	25.7	7.15	193	3.4	12
WEHFB	Wheeler	TRM	277 Forebay	06/16/1993	14:19:00	24	7.07	199	1.7	12.7
WEHFB	Wheeler	TRM	277 Forebay	07/14/1993	14:49:00	31.9	8.65	161	9.5	0.3
WEHFB	Wheeler	TRM	277 Forebay	07/14/1993	14:50:00	31.8	8.67	162	9.4	1.5
WEHFB	Wheeler	TRM	277 Forebay	07/14/1993	14:51:00	31.3	8.68	163	9.4	4
WEHFB	Wheeler	TRM	277 Forebay	07/14/1993	14:53:00	30.9	8.54	165	8.8	6
WEHFB	Wheeler	TRM	277 Forebay	07/14/1993	14:54:00	30.9	8.47	164	8.7	7
WEHFB	Wheeler	TRM	277 Forebay	07/14/1993	14:55:00	29.8	7.45	170	3.2	8
WEHFB	Wheeler	TRM	277 Forebay	07/14/1993	14:56:00	29.6	7.23	174	2.9	10
WEHFB	Wheeler	TRM	277 Forebay	07/14/1993	14:57:00	29.4	7.06	179	2	11
WEHFB	Wheeler	TRM	277 Forebay	07/14/1993	14:58:00	28.6	6.97	208	0.06	12
WEHFB	Wheeler	TRM	277 Forebay	07/14/1993	14:59:00	27.8	7.01	221	0.05	13
WEHFB	Wheeler	TRM	277 Forebay	08/11/1993	13:24:00	31.2	8.84	166	10.2	0.3
WEHFB	Wheeler	TRM	277 Forebay	08/11/1993	13:25:00	30.2	8.9	163	10.7	1.5
WEHFB	Wheeler	TRM	277 Forebay	08/11/1993	13:27:00	29.8	8.73	164	10	2.8
WEHFB	Wheeler	TRM	277 Forebay	08/11/1993	13:28:00	29.5	8.34	165	8.1	4
WEHFB	Wheeler	TRM	277 Forebay	08/11/1993	13:29:00	29.3	8.27	165	8.2	6
WEHFB	Wheeler	TRM	277 Forebay	08/11/1993	13:30:00	29.2	7.98	166	7.5	7
WEHFB	Wheeler	TRM	277 Forebay	08/11/1993	13:31:00	29.2	7.8	168	7	8
WEHFB	Wheeler	TRM	277 Forebay	08/11/1993	13:32:00	29.1	7.64	166	6.9	9
WEHFB	Wheeler	TRM	277 Forebay	08/11/1993	13:33:00	28.8	7.35	166	4.9	10
WEHFB	Wheeler	TRM	277 Forebay	08/11/1993	13:34:00	28.7	7.06	168	4.2	10.3
WEHFB	Wheeler	TRM	277 Forebay	08/11/1993	13:35:00	28.7	7.15	170	4	11

WEHFB	Wheeler	TRM	277 Forebay	08/11/1993	13:36:00	28.6	7.08	174		3.5	12
WEHFB	Wheeler	TRM	277 Forebay	08/11/1993	13:37:00	28.6	7.03	179		3.1	13.3
WEHFB	Wheeler	TRM	277 Forebay	09/16/1993	11:12:00	26.2	7.59	194		6.8	0.3
WEHFB	Wheeler	TRM	277 Forebay	09/16/1993	11:12:00	26.2	7.56	193		6.6	1.5
WEHFB	Wheeler	TRM	277 Forebay	09/16/1993	11:13:00	26.2	7.53	192		6.6	4
WEHFB	Wheeler	TRM	277 Forebay	09/16/1993	11:14:00	26.2	7.51	192		6.7	6
WEHFB	Wheeler	TRM	277 Forebay	09/16/1993	11:15:00	26.2	7.5	192		6.7	8
WEHFB	Wheeler	TRM	277 Forebay	09/16/1993	11:16:00	26.2	7.46	193		6.6	9.3
WEHFB	Wheeler	TRM	277 Forebay	09/16/1993	11:17:00	26.2	7.47	190		6.7	10
WEHFB	Wheeler	TRM	277 Forebay	09/16/1993	11:18:00	26.2	7.45	193		6.6	12
WEHFB	Wheeler	TRM	277 Forebay	09/16/1993	11:19:00	26.2	7.43	195		6.5	12.3
WEHFB	Wheeler	TRM	277 Forebay	04/13/1994	12:49:00	16.6	7.6	137		9.5	0.3
WEHFB	Wheeler	TRM	277 Forebay	04/13/1994	12:51:00	16.4	7.6	137		9.4	1.5
WEHFB	Wheeler	TRM	277 Forebay	04/13/1994	12:53:00	16.3	7.6	137		9.4	4
WEHFB	Wheeler	TRM	277 Forebay	04/13/1994	12:55:00	16.3	7.5	138		9.4	6
WEHFB	Wheeler	TRM	277 Forebay	04/13/1994	12:57:00	16.2	7.5	138		9.3	8
WEHFB	Wheeler	TRM	277 Forebay	04/13/1994	12:59:00	16.2	7.5	137		9.3	9
WEHFB	Wheeler	TRM	277 Forebay	04/13/1994	13:00:00	16.2	7.5	137		9.3	10
WEHFB	Wheeler	TRM	277 Forebay	04/13/1994	13:01:00	16.2	7.5	137		9.2	12
WEHFB	Wheeler	TRM	277 Forebay	05/11/1994	10:47:00	22.3	9.1	136		12.5	0.3
WEHFB	Wheeler	TRM	277 Forebay	05/11/1994	10:49:00	22.1	9	135		12.3	1
WEHFB	Wheeler	TRM	277 Forebay	05/11/1994	10:51:00	21.8	8.7	137		10.5	1.5
WEHFB	Wheeler	TRM	277 Forebay	05/11/1994	10:53:00	21.3	8.2	138		9.6	2.5
WEHFB	Wheeler	TRM	277 Forebay	05/11/1994	10:54:00	21.2	8.1	138		9.5	4
WEHFB	Wheeler	TRM	277 Forebay	05/11/1994	10:59:00	21	8.2	137		9.4	6
WEHFB	Wheeler	TRM	277 Forebay	05/11/1994	11:01:00	20.6	7.7	140		8.4	8
WEHFB	Wheeler	TRM	277 Forebay	05/11/1994	11:03:00	20.4	7.5	143		7.8	9
WEHFB	Wheeler	TRM	277 Forebay	05/11/1994	11:07:00	20.4	7.6	142		7.9	10
WEHFB	Wheeler	TRM	277 Forebay	05/11/1994	11:09:00	20.3	7.5	142		7.6	12
WEHFB	Wheeler	TRM	277 Forebay	06/15/1994	10:31:00	29.5	8.99	149		10.9	0.3
WEHFB	Wheeler	TRM	277 Forebay	06/15/1994	10:33:00	28.2	8.93	149		10.8	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/15/1994	10:35:00	28	8.85	149		10.2	2.5
WEHFB	Wheeler	TRM	277 Forebay	06/15/1994	10:37:00	27.8	8.69	149		9.5	3
WEHFB	Wheeler	TRM	277 Forebay	06/15/1994	10:39:00	27.7	8.59	148		9.1	4
WEHFB	Wheeler	TRM	277 Forebay	06/15/1994	10:41:00	27.7	8.54	149		8.8	4.5
WEHFB	Wheeler	TRM	277 Forebay	06/15/1994	10:43:00	27.5	8.22	149		7.9	5
WEHFB	Wheeler	TRM	277 Forebay	06/15/1994	10:45:00	27.4	8.06	148		7.7	5.5

WEHFB	Wheeler	TRM	277	Forebay	06/15/1994	10:47:00	27.2	7.67	152	6.6	6
WEHFB	Wheeler	TRM	277	Forebay	06/15/1994	10:49:00	27	7.46	152	6.2	6.5
WEHFB	Wheeler	TRM	277	Forebay	06/15/1994	10:51:00	26.8	7.27	153	5.4	7.6
WEHFB	Wheeler	TRM	277	Forebay	06/15/1994	10:53:00	26.7	7.24	152	5.1	8
WEHFB	Wheeler	TRM	277	Forebay	06/15/1994	10:55:00	26.4	7.12	159	4.4	9.1
WEHFB	Wheeler	TRM	277	Forebay	06/15/1994	10:57:00	26.3	7.15	160	4.4	10
WEHFB	Wheeler	TRM	277	Forebay	06/15/1994	11:01:00	26	7.1	159	4	12.1
WEHFB	Wheeler	TRM	277	Forebay	07/13/1994	10:38:00	27.8	7.8	162	6.9	0.3
WEHFB	Wheeler	TRM	277	Forebay	07/13/1994	10:40:00	27.8	7.8	163	6.9	1.5
WEHFB	Wheeler	TRM	277	Forebay	07/13/1994	10:42:00	27.8	7.7	164	6.9	4
WEHFB	Wheeler	TRM	277	Forebay	07/13/1994	10:46:00	27.8	7.7	162	6.9	6
WEHFB	Wheeler	TRM	277	Forebay	07/13/1994	10:48:00	27.8	7.7	163	6.9	8
WEHFB	Wheeler	TRM	277	Forebay	07/13/1994	10:50:00	27.9	7.7	162	6.8	9.3
WEHFB	Wheeler	TRM	277	Forebay	07/13/1994	10:52:00	27.9	7.7	163	6.9	10
WEHFB	Wheeler	TRM	277	Forebay	07/13/1994	10:54:00	27.9	7.7	162	6.9	12
WEHFB	Wheeler	TRM	277	Forebay	07/13/1994	10:56:00	27.9	7.7	162	6.8	12.3
WEHFB	Wheeler	TRM	277	Forebay	08/10/1994	11:02:00	28.9	7.97	155	8.2	0.3
WEHFB	Wheeler	TRM	277	Forebay	08/10/1994	11:06:00	28.7	8.05	155	8.4	1.5
WEHFB	Wheeler	TRM	277	Forebay	08/10/1994	11:10:00	28	7.65	156	7.5	4
WEHFB	Wheeler	TRM	277	Forebay	08/10/1994	11:14:00	27.8	7.38	158	6.6	6
WEHFB	Wheeler	TRM	277	Forebay	08/10/1994	11:18:00	27.7	7.31	160	6.3	8
WEHFB	Wheeler	TRM	277	Forebay	08/10/1994	11:22:00	27.6	7.25	161	5.9	9.4
WEHFB	Wheeler	TRM	277	Forebay	08/10/1994	11:26:00	27.7	7.27	161	6	10
WEHFB	Wheeler	TRM	277	Forebay	08/10/1994	11:30:00	27.6	7.21	162	5.5	12
WEHFB	Wheeler	TRM	277	Forebay	08/10/1994	11:34:00	27.5	7.17	164	5	12.4
WEHFB	Wheeler	TRM	277	Forebay	09/14/1994	11:13:00	27.9	8.5	156	10.3	0.3
WEHFB	Wheeler	TRM	277	Forebay	09/14/1994	11:15:00	27.5	8.5	156	10.5	1.5
WEHFB	Wheeler	TRM	277	Forebay	09/14/1994	11:17:00	27.4	8.4	156	9.5	2.5
WEHFB	Wheeler	TRM	277	Forebay	09/14/1994	11:19:00	27.3	8.1	158	8.7	4
WEHFB	Wheeler	TRM	277	Forebay	09/14/1994	11:23:00	27.2	8	157	8.5	6
WEHFB	Wheeler	TRM	277	Forebay	09/14/1994	11:25:00	27.1	7.7	155	7.7	6.5
WEHFB	Wheeler	TRM	277	Forebay	09/14/1994	11:27:00	27	7.5	161	6.9	7
WEHFB	Wheeler	TRM	277	Forebay	09/14/1994	11:29:00	27	7.4	160	6.6	8
WEHFB	Wheeler	TRM	277	Forebay	09/14/1994	11:31:00	26.9	7.4	162	6.4	8.7
WEHFB	Wheeler	TRM	277	Forebay	09/14/1994	11:33:00	26.8	7.3	163	5.7	10
WEHFB	Wheeler	TRM	277	Forebay	09/14/1994	11:35:00	26.7	7.2	163	5.1	11.7
WEHFB	Wheeler	TRM	277	Forebay	04/03/1995	13:47:00	17.2	8.53	153	11.2	0.3

WEHFB	Wheeler	TRM	277	Forebay	04/03/1995	13:51:00	17.2	8.51	154	11.2	1.5
WEHFB	Wheeler	TRM	277	Forebay	04/03/1995	13:55:00	17.1	8.44	154	11	4
WEHFB	Wheeler	TRM	277	Forebay	04/03/1995	13:59:00	16.9	8.34	155	10.7	6
WEHFB	Wheeler	TRM	277	Forebay	04/03/1995	14:03:00	16.5	8.18	156	10.2	8
WEHFB	Wheeler	TRM	277	Forebay	04/03/1995	14:07:00	16.3	8.04	156	9.9	10
WEHFB	Wheeler	TRM	277	Forebay	04/03/1995	14:11:00	16	7.89	154	9.4	11.2
WEHFB	Wheeler	TRM	277	Forebay	05/09/1995	6:42:00	21.2	8.12	153	9.6	0.5
WEHFB	Wheeler	TRM	277	Forebay	05/09/1995	6:46:00	21.4	8.24	153	9.6	1.6
WEHFB	Wheeler	TRM	277	Forebay	05/09/1995	6:50:00	21	8.11	154	9.3	4.1
WEHFB	Wheeler	TRM	277	Forebay	05/09/1995	6:54:00	20.8	7.97	155	9	6
WEHFB	Wheeler	TRM	277	Forebay	05/09/1995	6:58:00	20.5	7.78	156	8.4	8.1
WEHFB	Wheeler	TRM	277	Forebay	05/09/1995	7:02:00	20	7.68	160	8.1	10.1
WEHFB	Wheeler	TRM	277	Forebay	05/09/1995	7:06:00	19.7	7.52	157	7.2	12.2
WEHFB	Wheeler	TRM	277	Forebay	06/20/1995	6:42:00	26.5	7.83	174	5.9	0.3
WEHFB	Wheeler	TRM	277	Forebay	06/20/1995	6:46:00	26.5	7.78	174	5.9	1.5
WEHFB	Wheeler	TRM	277	Forebay	06/20/1995	6:50:00	26.5	7.78	174	5.8	4
WEHFB	Wheeler	TRM	277	Forebay	06/20/1995	6:54:00	26.5	7.76	174	5.8	6
WEHFB	Wheeler	TRM	277	Forebay	06/20/1995	6:58:00	26.5	7.75	174	5.8	8
WEHFB	Wheeler	TRM	277	Forebay	06/20/1995	7:02:00	26.5	7.71	175	5.8	10
WEHFB	Wheeler	TRM	277	Forebay	06/20/1995	7:06:00	26.5	7.53	175	5.1	11
WEHFB	Wheeler	TRM	277	Forebay	06/20/1995	7:10:00	26.4	7.4	178	3.7	11.6
WEHFB	Wheeler	TRM	277	Forebay	07/25/1995	6:52:00	30.2	8.11	180	6.7	0.3
WEHFB	Wheeler	TRM	277	Forebay	07/25/1995	6:56:00	30.2	8.06	181	6.7	1.5
WEHFB	Wheeler	TRM	277	Forebay	07/25/1995	7:00:00	30.2	8.02	179	6.7	4
WEHFB	Wheeler	TRM	277	Forebay	07/25/1995	7:04:00	30.2	7.99	180	6.6	6
WEHFB	Wheeler	TRM	277	Forebay	07/25/1995	7:08:00	30.2	8.01	178	6.7	8
WEHFB	Wheeler	TRM	277	Forebay	07/25/1995	7:12:00	30.1	7.88	179	6.1	10
WEHFB	Wheeler	TRM	277	Forebay	07/25/1995	7:16:00	29.9	7.42	185	3.6	11.1
WEHFB	Wheeler	TRM	277	Forebay	08/29/1995	6:49:00	29.5	7.79	198	6.2	0.3
WEHFB	Wheeler	TRM	277	Forebay	08/29/1995	6:53:00	29.6	7.77	198	6.2	1.5
WEHFB	Wheeler	TRM	277	Forebay	08/29/1995	6:57:00	29.6	7.69	199	6.2	4
WEHFB	Wheeler	TRM	277	Forebay	08/29/1995	7:01:00	29.6	7.67	200	6.2	6
WEHFB	Wheeler	TRM	277	Forebay	08/29/1995	7:05:00	29.6	7.65	197	6.1	8
WEHFB	Wheeler	TRM	277	Forebay	08/29/1995	7:09:00	29.6	7.57	198	6	10
WEHFB	Wheeler	TRM	277	Forebay	08/29/1995	7:13:00	29.5	7.53	198	5.8	12
WEHFB	Wheeler	TRM	277	Forebay	04/08/1997	13:32:00	17.2	8.48	169	10.3	0.3
WEHFB	Wheeler	TRM	277	Forebay	04/08/1997	13:35:00	17.2	8.48	169	10.2	1.5

WEHFB	Wheeler	TRM	277 Forebay	04/08/1997	13:38:00	17	8.24	165	9.7	2
WEHFB	Wheeler	TRM	277 Forebay	04/08/1997	13:41:00	16.9	8.08	166	9.3	3
WEHFB	Wheeler	TRM	277 Forebay	04/08/1997	13:44:00	16.9	8.06	166	9.3	4
WEHFB	Wheeler	TRM	277 Forebay	04/08/1997	13:47:00	16.8	8.00	167	9.2	5
WEHFB	Wheeler	TRM	277 Forebay	04/08/1997	13:50:00	16.8	8.03	167	9.1	6
WEHFB	Wheeler	TRM	277 Forebay	04/08/1997	13:53:00	16.8	8.03	168	9	7
WEHFB	Wheeler	TRM	277 Forebay	04/08/1997	13:56:00	16.8	8	169	8.9	8
WEHFB	Wheeler	TRM	277 Forebay	04/08/1997	13:59:00	16.8	7.98	168	8.8	9
WEHFB	Wheeler	TRM	277 Forebay	04/08/1997	14:02:00	16.7	7.91	177	8.4	10
WEHFB	Wheeler	TRM	277 Forebay	04/08/1997	14:05:00	16.7	7.88	179	8.3	11
WEHFB	Wheeler	TRM	277 Forebay	04/08/1997	14:08:00	16.4	7.8	205	7.9	13.1
WEHFB	Wheeler	TRM	277 Forebay	05/05/1997	11:12:00	19	7.71	164	8.9	0.3
WEHFB	Wheeler	TRM	277 Forebay	05/05/1997	11:15:00	18.4	7.63	161	8.8	1.5
WEHFB	Wheeler	TRM	277 Forebay	05/05/1997	11:18:00	18.4	7.61	160	8.7	4
WEHFB	Wheeler	TRM	277 Forebay	05/05/1997	11:21:00	18.4	7.61	160	8.7	6
WEHFB	Wheeler	TRM	277 Forebay	05/05/1997	11:24:00	18.4	7.62	160	8.7	8
WEHFB	Wheeler	TRM	277 Forebay	05/05/1997	11:27:00	18.4	7.62	160	8.7	10
WEHFB	Wheeler	TRM	277 Forebay	05/05/1997	11:30:00	18.4	7.62	160	8.7	12
WEHFB	Wheeler	TRM	277 Forebay	05/05/1997	11:33:00	18.4	7.63	160	8.7	13.8
WEHFB	Wheeler	TRM	277 Forebay	06/09/1997	14:35:00	20.7	7.61	154	7.2	0.3
WEHFB	Wheeler	TRM	277 Forebay	06/09/1997	14:38:00	20.7	7.6	154	7.1	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/09/1997	14:41:00	20.7	7.61	154	7.1	4
WEHFB	Wheeler	TRM	277 Forebay	06/09/1997	14:44:00	20.7	7.59	155	7	6
WEHFB	Wheeler	TRM	277 Forebay	06/09/1997	14:47:00	20.7	7.57	155	6.9	8
WEHFB	Wheeler	TRM	277 Forebay	06/09/1997	14:50:00	20.5	7.53	164	6.5	10
WEHFB	Wheeler	TRM	277 Forebay	06/09/1997	14:53:00	20.4	7.53	166	6.4	12
WEHFB	Wheeler	TRM	277 Forebay	06/09/1997	14:56:00	20.2	7.55	171	6.3	14.2
WEHFB	Wheeler	TRM	277 Forebay	07/07/1997	14:25:00	28.6	7.72	137	7.9	0.3
WEHFB	Wheeler	TRM	277 Forebay	07/07/1997	14:28:00	28.5	7.63	137	7.5	1.5
WEHFB	Wheeler	TRM	277 Forebay	07/07/1997	14:31:00	28.3	7.62	137	7.6	4
WEHFB	Wheeler	TRM	277 Forebay	07/07/1997	14:34:00	28.3	7.52	137	7.3	6
WEHFB	Wheeler	TRM	277 Forebay	07/07/1997	14:37:00	28.2	7.44	137	7	8
WEHFB	Wheeler	TRM	277 Forebay	07/07/1997	14:40:00	28.2	7.37	137	6.7	9
WEHFB	Wheeler	TRM	277 Forebay	07/07/1997	14:43:00	28	7.27	136	6.1	10
WEHFB	Wheeler	TRM	277 Forebay	07/07/1997	14:46:00	27.5	7.2	133	4.7	11
WEHFB	Wheeler	TRM	277 Forebay	07/07/1997	14:49:00	27.1	7.23	131	4.4	12
WEHFB	Wheeler	TRM	277 Forebay	07/07/1997	14:52:00	25.8	7.31	164	3.5	12.5

WEHFB	Wheeler	TRM	277 Forebay	08/12/1997	12:57:00	29.1	8.63	170	10	0.3
WEHFB	Wheeler	TRM	277 Forebay	08/12/1997	13:01:00	28.8	8.56	170	9.4	1.5
WEHFB	Wheeler	TRM	277 Forebay	08/12/1997	13:05:00	28	8.02	171	7.8	3
WEHFB	Wheeler	TRM	277 Forebay	08/12/1997	13:09:00	28	7.82	171	7.5	4
WEHFB	Wheeler	TRM	277 Forebay	08/12/1997	13:13:00	27.9	7.45	167	6.1	5
WEHFB	Wheeler	TRM	277 Forebay	08/12/1997	13:17:00	27.6	7.34	163	5.3	6
WEHFB	Wheeler	TRM	277 Forebay	08/12/1997	13:21:00	27.3	7.33	169	4.8	8
WEHFB	Wheeler	TRM	277 Forebay	08/12/1997	13:25:00	27.2	7.33	165	3.9	10
WEHFB	Wheeler	TRM	277 Forebay	08/12/1997	13:29:00	27.1	7.42	165	3.3	12.4
WEHFB	Wheeler	TRM	277 Forebay	09/08/1997	13:24:00	28.4	8.08	184	8.8	0.3
WEHFB	Wheeler	TRM	277 Forebay	09/08/1997	13:27:00	27.8	7.51	185	6.2	1.5
WEHFB	Wheeler	TRM	277 Forebay	09/08/1997	13:30:00	27.6	7.49	185	5.8	4
WEHFB	Wheeler	TRM	277 Forebay	09/08/1997	13:33:00	27.6	7.51	185	5.7	6
WEHFB	Wheeler	TRM	277 Forebay	09/08/1997	13:36:00	27.6	7.51	185	5.5	8
WEHFB	Wheeler	TRM	277 Forebay	09/08/1997	13:39:00	27.5	7.56	184	5.5	10
WEHFB	Wheeler	TRM	277 Forebay	09/08/1997	13:42:00	27.5	7.65	184	5.4	11.1
WEHFB	Wheeler	TRM	277 Forebay	04/05/1999	11:21:23	18.4	9	162	13.1	0.3
WEHFB	Wheeler	TRM	277 Forebay	04/05/1999	11:22:30	17.7	8.9	165	12.7	1.5
WEHFB	Wheeler	TRM	277 Forebay	04/05/1999	11:23:46	17	8.7	167	11.5	3
WEHFB	Wheeler	TRM	277 Forebay	04/05/1999	11:24:30	16.1	8.3	170	10.7	4
WEHFB	Wheeler	TRM	277 Forebay	04/05/1999	11:25:12	15	7.9	169	9.7	6
WEHFB	Wheeler	TRM	277 Forebay	04/05/1999	11:26:47	14.7	7.8	179	9.4	8
WEHFB	Wheeler	TRM	277 Forebay	04/05/1999	11:27:32	14.4	7.6	176	8.7	10
WEHFB	Wheeler	TRM	277 Forebay	04/05/1999	11:28:40	14.1	7.5	175	8.3	12
WEHFB	Wheeler	TRM	277 Forebay	04/05/1999	11:29:56	14.2	7.5	179	8.6	11
WEHFB	Wheeler	TRM	277 Forebay	05/10/1999	13:52:10	24.91	7.44	174.1	8.31	0.3
WEHFB	Wheeler	TRM	277 Forebay	05/10/1999	13:53:27	23.42	7.43	172.6	8.63	1.5
WEHFB	Wheeler	TRM	277 Forebay	05/10/1999	13:54:40	22.68	7.3	171.4	8.19	3
WEHFB	Wheeler	TRM	277 Forebay	05/10/1999	13:55:27	22.43	7.27	170.2	8.1	4
WEHFB	Wheeler	TRM	277 Forebay	05/10/1999	13:56:19	21.96	7.27	168.4	7.91	6
WEHFB	Wheeler	TRM	277 Forebay	05/10/1999	13:57:08	21.63	7.26	168.8	7.73	8
WEHFB	Wheeler	TRM	277 Forebay	05/10/1999	14:03:14	21.25	7.2	166.8	7.68	10
WEHFB	Wheeler	TRM	277 Forebay	05/10/1999	14:04:12	21.11	7.15	165.5	7.14	12
WEHFB	Wheeler	TRM	277 Forebay	05/10/1999	14:04:52	21.09	7.1	165.3	6.87	12.8
WEHFB	Wheeler	TRM	277 Forebay	06/07/1999	10:50:32	29.19	9.23	150.8	10.78	0.3
WEHFB	Wheeler	TRM	277 Forebay	06/07/1999	10:51:28	28.1	9.07	151.1	9.96	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/07/1999	10:52:16	27.52	8.85	154	9.31	4

WEHFB	Wheeler	TRM	277	Forebay	06/07/1999	10:53:45	27.34	8.8	155	8.94	6
WEHFB	Wheeler	TRM	277	Forebay	06/07/1999	10:54:19	26.15	7.82	156.5	5.43	8
WEHFB	Wheeler	TRM	277	Forebay	06/07/1999	10:55:05	26.8	8.33	155.4	7.7	7
WEHFB	Wheeler	TRM	277	Forebay	06/07/1999	10:56:35	24.55	7.27	179.9	2.89	10.1
WEHFB	Wheeler	TRM	277	Forebay	06/07/1999	10:57:32	25.04	7.26	164.1	3.63	9
WEHFB	Wheeler	TRM	277	Forebay	06/07/1999	10:59:23	24.29	7.16	198	2.18	12
WEHFB	Wheeler	TRM	277	Forebay	06/07/1999	11:01:58	23.98	7.13	230.5	1.34	13
WEHFB	Wheeler	TRM	277	Forebay	06/22/1999	7:46:33	28.16	9.02	160.2	10.35	0.3
WEHFB	Wheeler	TRM	277	Forebay	06/22/1999	7:47:41	28.16	9	160.7	10.27	1.5
WEHFB	Wheeler	TRM	277	Forebay	06/22/1999	7:48:51	27.73	8.42	162.5	8.36	3
WEHFB	Wheeler	TRM	277	Forebay	06/22/1999	7:49:44	27.36	7.78	163.4	6.75	4
WEHFB	Wheeler	TRM	277	Forebay	06/22/1999	7:50:39	27.17	7.63	163.9	6.25	5
WEHFB	Wheeler	TRM	277	Forebay	06/22/1999	7:51:34	27.06	7.53	163.6	5.73	6
WEHFB	Wheeler	TRM	277	Forebay	06/22/1999	7:52:28	26.86	7.46	163.8	5.36	7
WEHFB	Wheeler	TRM	277	Forebay	06/22/1999	7:53:18	26.81	7.36	162.7	5.03	8
WEHFB	Wheeler	TRM	277	Forebay	06/22/1999	7:54:08	26.76	7.32	162.4	4.81	9
WEHFB	Wheeler	TRM	277	Forebay	06/22/1999	7:55:01	26.72	7.23	159.7	4.72	10
WEHFB	Wheeler	TRM	277	Forebay	06/22/1999	7:55:44	26.67	7.2	159.4	4.34	11
WEHFB	Wheeler	TRM	277	Forebay	06/22/1999	7:56:32	26.6	7.13	155.7	4.19	12
WEHFB	Wheeler	TRM	277	Forebay	06/22/1999	7:57:11	26.54	7.05	152.6	3.47	12.6
WEHFB	Wheeler	TRM	277	Forebay	07/12/1999	10:09:04	29.63	7.84	160.7	7.27	0.3
WEHFB	Wheeler	TRM	277	Forebay	07/12/1999	10:09:54	29.45	7.74	160.5	7.2	1.5
WEHFB	Wheeler	TRM	277	Forebay	07/12/1999	10:10:47	29.41	7.68	159.5	6.86	3
WEHFB	Wheeler	TRM	277	Forebay	07/12/1999	10:11:32	29.4	7.66	159.8	6.83	4
WEHFB	Wheeler	TRM	277	Forebay	07/12/1999	10:12:47	29.39	7.63	159.5	6.71	6
WEHFB	Wheeler	TRM	277	Forebay	07/12/1999	10:13:55	29.37	7.62	160.3	6.6	8
WEHFB	Wheeler	TRM	277	Forebay	07/12/1999	10:17:16	28.88	7.16	168.2	3.16	10
WEHFB	Wheeler	TRM	277	Forebay	07/12/1999	10:18:35	28.38	7.05	175.2	1.85	11
WEHFB	Wheeler	TRM	277	Forebay	07/12/1999	10:19:29	27.89	7.01	182.3	1.26	12
WEHFB	Wheeler	TRM	277	Forebay	07/12/1999	10:20:24	27.01	7.01	216.9	0.54	12.9
WEHFB	Wheeler	TRM	277	Forebay	07/26/1999	9:43:16	32.43	8.91	165.6	9.52	0.3
WEHFB	Wheeler	TRM	277	Forebay	07/26/1999	9:44:23	32.3	8.89	166.6	9.55	1.5
WEHFB	Wheeler	TRM	277	Forebay	07/26/1999	9:45:10	31.4	8.36	168.3	8.03	4
WEHFB	Wheeler	TRM	277	Forebay	07/26/1999	9:46:12	31.19	7.93	168.9	7.19	6
WEHFB	Wheeler	TRM	277	Forebay	07/26/1999	9:47:23	30.86	7.58	169.2	6.23	8
WEHFB	Wheeler	TRM	277	Forebay	07/26/1999	9:48:24	30.58	7.39	169.5	5.24	9
WEHFB	Wheeler	TRM	277	Forebay	07/26/1999	9:49:14	30.42	7.3	169.7	4.26	10

WEHFB	Wheeler	TRM	277	Forebay	07/26/1999	9:50:21	30.35	7.22	171.1	3.58	11
WEHFB	Wheeler	TRM	277	Forebay	07/26/1999	9:51:02	30.11	7.13	172.9	2.13	12
WEHFB	Wheeler	TRM	277	Forebay	07/26/1999	9:52:12	29.91	7.09	176.9	1.42	13
WEHFB	Wheeler	TRM	277	Forebay	08/09/1999	8:44:37	30.61	7.72	161.8	6.43	0.3
WEHFB	Wheeler	TRM	277	Forebay	08/09/1999	8:45:12	30.61	7.67	162.3	6.5	1.5
WEHFB	Wheeler	TRM	277	Forebay	08/09/1999	8:46:03	30.61	7.69	162.1	6.34	4
WEHFB	Wheeler	TRM	277	Forebay	08/09/1999	8:46:58	30.61	7.66	162.3	6.33	6
WEHFB	Wheeler	TRM	277	Forebay	08/09/1999	8:47:49	30.6	7.64	161.3	6.31	8
WEHFB	Wheeler	TRM	277	Forebay	08/09/1999	8:48:41	30.6	7.63	161.5	6.29	10
WEHFB	Wheeler	TRM	277	Forebay	08/09/1999	8:50:30	30.54	7.41	168	5.12	11
WEHFB	Wheeler	TRM	277	Forebay	08/09/1999	8:51:18	30.43	7.26	175.3	3.66	12
WEHFB	Wheeler	TRM	277	Forebay	08/09/1999	8:52:02	30.39	7.15	176.6	2.66	12.8
WEHFB	Wheeler	TRM	277	Forebay	08/23/1999	10:01:00	29.9	7.9	156	7	0.3
WEHFB	Wheeler	TRM	277	Forebay	08/23/1999	10:01:47	29.9	7.9	156	6.9	1.5
WEHFB	Wheeler	TRM	277	Forebay	08/23/1999	10:02:43	29.8	7.8	156	6.6	4
WEHFB	Wheeler	TRM	277	Forebay	08/23/1999	10:03:25	29.7	7.8	156	6.4	6
WEHFB	Wheeler	TRM	277	Forebay	08/23/1999	10:04:11	29.7	7.7	156	6.2	8
WEHFB	Wheeler	TRM	277	Forebay	08/23/1999	10:05:03	29.7	7.6	156	5.7	10
WEHFB	Wheeler	TRM	277	Forebay	08/23/1999	10:06:04	29.3	7.3	160	3.7	11.9
WEHFB	Wheeler	TRM	277	Forebay	08/23/1999	10:06:48	29.3	7.3	161	3.4	11.9
WEHFB	Wheeler	TRM	277	Forebay	08/23/1999	10:07:43	29.2	7.1	280	0.7	12.9
WEHFB	Wheeler	TRM	277	Forebay	09/08/1999	9:18:47	29.43	8.49	159.7	7.71	0.3
WEHFB	Wheeler	TRM	277	Forebay	09/08/1999	9:19:27	29.41	8.43	159.5	7.61	1.5
WEHFB	Wheeler	TRM	277	Forebay	09/08/1999	9:20:30	29.4	8.41	160.1	7.64	4
WEHFB	Wheeler	TRM	277	Forebay	09/08/1999	9:21:17	29.3	8.22	160.5	7.14	6
WEHFB	Wheeler	TRM	277	Forebay	09/08/1999	9:23:35	29.13	7.68	161.2	6.01	7
WEHFB	Wheeler	TRM	277	Forebay	09/08/1999	9:24:25	29.04	7.53	161.2	5.2	8
WEHFB	Wheeler	TRM	277	Forebay	09/08/1999	9:25:23	28.74	7.26	163.1	3.16	9
WEHFB	Wheeler	TRM	277	Forebay	09/08/1999	9:26:06	28.71	7.18	163.5	2.81	10
WEHFB	Wheeler	TRM	277	Forebay	09/08/1999	9:26:52	28.69	7.12	163.6	2.47	10.6
WEHFB	Wheeler	TRM	277	Forebay	04/10/2000	8:50:58	16	7.5	131.3	8.8	0.3
WEHFB	Wheeler	TRM	277	Forebay	04/10/2000	8:51:37	16	7.5	131.5	8.8	1.5
WEHFB	Wheeler	TRM	277	Forebay	04/10/2000	8:52:31	15.8	7.5	131.6	8.6	3
WEHFB	Wheeler	TRM	277	Forebay	04/10/2000	8:53:04	15.8	7.5	130.5	8.5	4
WEHFB	Wheeler	TRM	277	Forebay	04/10/2000	8:53:42	15.7	7.5	131.4	8.4	6
WEHFB	Wheeler	TRM	277	Forebay	04/10/2000	8:54:53	15.6	7.4	133.3	8.3	8
WEHFB	Wheeler	TRM	277	Forebay	04/10/2000	8:55:54	15.5	7.4	136.3	8	10

WEHFB	Wheeler	TRM	277 Forebay	04/10/2000	9:02:22	15.5	7.4	138		8.1	12
WEHFB	Wheeler	TRM	277 Forebay	04/10/2000	9:03:13	15.5	7.3	138.1		7.6	13.8
WEHFB	Wheeler	TRM	277 Forebay	05/01/2000	11:08:27	17.4	7.4	144.8	68.7	6.5	13.6
WEHFB	Wheeler	TRM	277 Forebay	05/01/2000	11:09:50	17.5	7.5	144.2	78.8	7.5	12.6
WEHFB	Wheeler	TRM	277 Forebay	05/01/2000	11:10:31	17.5	7.5	144	80	7.6	12
WEHFB	Wheeler	TRM	277 Forebay	05/01/2000	11:11:34	17.6	7.5	143.2	84.5	8	10
WEHFB	Wheeler	TRM	277 Forebay	05/01/2000	11:12:52	18	7.8	142.3	97.8	9.2	8
WEHFB	Wheeler	TRM	277 Forebay	05/01/2000	11:14:48	18.5	8.4	141.1	111.1	10.3	7
WEHFB	Wheeler	TRM	277 Forebay	05/01/2000	11:15:47	19.3	9	138.8	134.6	12.3	6
WEHFB	Wheeler	TRM	277 Forebay	05/01/2000	11:17:06	19.4	9	137.6	136.8	12.5	4
WEHFB	Wheeler	TRM	277 Forebay	05/01/2000	11:18:06	19.4	9.1	137.4	137.4	12.5	3
WEHFB	Wheeler	TRM	277 Forebay	05/01/2000	11:19:22	19.7	9.1	137.3	143	12.9	1.5
WEHFB	Wheeler	TRM	277 Forebay	05/01/2000	11:20:19	21	9.1	139.7	149.7	13.2	0.3
WEHFB	Wheeler	TRM	277 Forebay	05/22/2000	12:58:00	22.7	7.7	161	40.3	3.4	13.5
WEHFB	Wheeler	TRM	277 Forebay	05/22/2000	12:58:45	23.1	7.6	151	64.6	5.5	12
WEHFB	Wheeler	TRM	277 Forebay	05/22/2000	12:59:33	23.2	7.5	149	71.8	6.1	10
WEHFB	Wheeler	TRM	277 Forebay	05/22/2000	13:00:15	23.3	7.5	149	80.7	6.8	8
WEHFB	Wheeler	TRM	277 Forebay	05/22/2000	13:00:58	23.4	7.6	147.6	91.1	7.7	6
WEHFB	Wheeler	TRM	277 Forebay	05/22/2000	13:01:39	23.5	7.7	146.5	100.8	8.5	4
WEHFB	Wheeler	TRM	277 Forebay	05/22/2000	13:02:23	23.5	7.9	146.8	102.5	8.6	3
WEHFB	Wheeler	TRM	277 Forebay	05/22/2000	13:03:14	23.8	8.2	146.6	113	9.4	1.5
WEHFB	Wheeler	TRM	277 Forebay	05/22/2000	13:03:59	26.2	8.9	146.7	151.4	12.1	0.3
WEHFB	Wheeler	TRM	277 Forebay	06/12/2000	9:34:00	25.2	7.1	161	40.7	3.3	12.6
WEHFB	Wheeler	TRM	277 Forebay	06/12/2000	9:34:46	25.3	7.1	162	42.7	3.5	11.6
WEHFB	Wheeler	TRM	277 Forebay	06/12/2000	9:35:42	25.6	7.1	157	47	3.8	10
WEHFB	Wheeler	TRM	277 Forebay	06/12/2000	9:36:59	26	7.2	154	61.2	4.9	8
WEHFB	Wheeler	TRM	277 Forebay	06/12/2000	9:38:03	25.7	7.1	157	50.8	4.1	9
WEHFB	Wheeler	TRM	277 Forebay	06/12/2000	9:39:31	26.4	7.4	153	76.3	6.1	7
WEHFB	Wheeler	TRM	277 Forebay	06/12/2000	9:40:25	26.7	7.5	153	81.9	6.5	6
WEHFB	Wheeler	TRM	277 Forebay	06/12/2000	9:41:41	26.9	7.6	152	86.9	6.9	5
WEHFB	Wheeler	TRM	277 Forebay	06/12/2000	9:42:32	27.2	8.2	150	103.1	8.1	4
WEHFB	Wheeler	TRM	277 Forebay	06/12/2000	9:43:38	27.6	8.6	150	113.7	8.9	3
WEHFB	Wheeler	TRM	277 Forebay	06/12/2000	9:44:30	27.9	8.7	151	122.7	9.5	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/12/2000	9:45:17	28.4	8.8	151	127	9.8	0.3
WEHFB	Wheeler	TRM	277 Forebay	06/21/2000	11:06:48	26.2	7	165	12.8	1	12.7
WEHFB	Wheeler	TRM	277 Forebay	06/21/2000	11:07:53	26.8	6.9	165	27.9	2.2	12
WEHFB	Wheeler	TRM	277 Forebay	06/21/2000	11:08:51	27.6	7.3	150	83.2	6.5	11

WEHFB	Wheeler	TRM	277 Forebay	06/21/2000	11:09:28	27.7	7.4	155	86.9	6.8	10
WEHFB	Wheeler	TRM	277 Forebay	06/21/2000	11:10:12	27.7	7.4	153	88.6	6.9	8
WEHFB	Wheeler	TRM	277 Forebay	06/21/2000	11:10:47	27.7	7.5	145	91.8	7.1	6
WEHFB	Wheeler	TRM	277 Forebay	06/21/2000	11:11:28	27.9	7.9	149.6	101.9	7.9	4
WEHFB	Wheeler	TRM	277 Forebay	06/21/2000	11:12:08	28	7.9	151	105.8	8.2	3
WEHFB	Wheeler	TRM	277 Forebay	06/21/2000	11:12:36	28.1	8	153	107.5	8.3	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/21/2000	11:13:05	28.1	8	153	106.9	8.2	0.3
WEHFB	Wheeler	TRM	277 Forebay	07/13/2000	8:44:02	29.2	7	174	3.9	0.3	12.7
WEHFB	Wheeler	TRM	277 Forebay	07/13/2000	8:44:56	29.3	7	172	6.2	0.5	12
WEHFB	Wheeler	TRM	277 Forebay	07/13/2000	8:46:12	29.6	7	165	13.2	1	11
WEHFB	Wheeler	TRM	277 Forebay	07/13/2000	8:47:25	30	7	161	27.9	2.1	10
WEHFB	Wheeler	TRM	277 Forebay	07/13/2000	8:48:20	30.2	7	159	41.6	3.1	9
WEHFB	Wheeler	TRM	277 Forebay	07/13/2000	8:49:14	30.4	7.1	159	48.9	3.6	8
WEHFB	Wheeler	TRM	277 Forebay	07/13/2000	8:50:34	30.7	7.2	158	62.4	4.6	7
WEHFB	Wheeler	TRM	277 Forebay	07/13/2000	8:51:12	30.7	7.2	162	68.1	5	6
WEHFB	Wheeler	TRM	277 Forebay	07/13/2000	8:52:32	30.7	7.4	157	76.3	5.6	5
WEHFB	Wheeler	TRM	277 Forebay	07/13/2000	8:53:58	30.8	7.5	158	81.7	6	4
WEHFB	Wheeler	TRM	277 Forebay	07/13/2000	8:54:34	30.8	7.4	155	84.5	6.2	3
WEHFB	Wheeler	TRM	277 Forebay	07/13/2000	8:55:14	31	7.9	156	93.9	6.9	1.5
WEHFB	Wheeler	TRM	277 Forebay	07/13/2000	8:56:15	31.4	8.5	155	111.2	8.1	0.3
WEHFB	Wheeler	TRM	277 Forebay	07/25/2000	12:47:33	28.5	7	168	52.5	4	13.4
WEHFB	Wheeler	TRM	277 Forebay	07/25/2000	12:48:27	28.5	7	172	53.2	4.1	13
WEHFB	Wheeler	TRM	277 Forebay	07/25/2000	12:49:29	28.7	7	171	58	4.4	11
WEHFB	Wheeler	TRM	277 Forebay	07/25/2000	12:50:35	28.8	7	169	60.6	4.6	9
WEHFB	Wheeler	TRM	277 Forebay	07/25/2000	12:51:52	28.9	7.1	172	64.6	4.9	7
WEHFB	Wheeler	TRM	277 Forebay	07/25/2000	12:53:05	29	7.1	170	68.4	5.2	5
WEHFB	Wheeler	TRM	277 Forebay	07/25/2000	12:54:26	29.1	7.2	171	72.5	5.5	3
WEHFB	Wheeler	TRM	277 Forebay	07/25/2000	12:55:32	29.3	7.3	176	81.9	6.2	1.5
WEHFB	Wheeler	TRM	277 Forebay	07/25/2000	12:56:19	30.7	7.5	168	92.4	6.8	0.3
WEHFB	Wheeler	TRM	277 Forebay	08/10/2000	8:22:24	29.6	6.9	171	32	2.4	13.6
WEHFB	Wheeler	TRM	277 Forebay	08/10/2000	8:23:27	29.6	6.9	176	32	2.4	13
WEHFB	Wheeler	TRM	277 Forebay	08/10/2000	8:24:16	29.7	6.8	175	35.1	2.6	12
WEHFB	Wheeler	TRM	277 Forebay	08/10/2000	8:25:24	29.7	6.9	176	36.9	2.8	11
WEHFB	Wheeler	TRM	277 Forebay	08/10/2000	8:26:09	29.9	6.9	175	47.6	3.6	10
WEHFB	Wheeler	TRM	277 Forebay	08/10/2000	8:26:57	30.1	7	175	58.8	4.4	8
WEHFB	Wheeler	TRM	277 Forebay	08/10/2000	8:28:12	30.2	7.1	178	67.6	5	7
WEHFB	Wheeler	TRM	277 Forebay	08/10/2000	8:28:48	30.3	7.2	176	72.5	5.4	6

WEHFB	Wheeler	TRM	277	Forebay	08/10/2000	8:30:05	30.4	7.3	174	80.6	6	5
WEHFB	Wheeler	TRM	277	Forebay	08/10/2000	8:30:49	30.5	7.4	180	93.1	6.9	4
WEHFB	Wheeler	TRM	277	Forebay	08/10/2000	8:32:06	30.6	7.5	177	94.4	7	3
WEHFB	Wheeler	TRM	277	Forebay	08/10/2000	8:33:07	30.9	8.2	173	109.6	8.1	1.5
WEHFB	Wheeler	TRM	277	Forebay	08/10/2000	8:33:51	30.9	8.3	174	115.9	8.5	0.3
WEHFB	Wheeler	TRM	277	Forebay	09/14/2000	8:54:51	26.5	7.5	180	70.1	5.6	12.2
WEHFB	Wheeler	TRM	277	Forebay	09/14/2000	8:55:26	26.5	7.4	182	71	5.6	12
WEHFB	Wheeler	TRM	277	Forebay	09/14/2000	8:56:08	26.5	7.5	179	71.9	5.7	10
WEHFB	Wheeler	TRM	277	Forebay	09/14/2000	8:56:41	26.6	7.5	183	74.7	5.9	8
WEHFB	Wheeler	TRM	277	Forebay	09/14/2000	8:57:28	26.7	7.7	175	83.8	6.6	6
WEHFB	Wheeler	TRM	277	Forebay	09/14/2000	8:58:13	26.8	7.9	178	91.2	7.2	4
WEHFB	Wheeler	TRM	277	Forebay	09/14/2000	8:59:02	26.9	7.9	177	93.8	7.4	3
WEHFB	Wheeler	TRM	277	Forebay	09/14/2000	8:59:42	26.9	7.9	179	95.2	7.5	1.5
WEHFB	Wheeler	TRM	277	Forebay	09/14/2000	9:00:25	27	8	177	96.3	7.6	0.3
WEHFB	Wheeler	TRM	277	Forebay	04/13/2001	8:17:05	13.27	7.62	184	77.6	8.03	13.4
WEHFB	Wheeler	TRM	277	Forebay	04/13/2001	8:18:07	13.48	7.58	183	80.7	8.31	13
WEHFB	Wheeler	TRM	277	Forebay	04/13/2001	8:19:02	13.88	7.58	172	81.2	8.28	11
WEHFB	Wheeler	TRM	277	Forebay	04/13/2001	8:19:48	15	7.64	169	88.3	8.79	9
WEHFB	Wheeler	TRM	277	Forebay	04/13/2001	8:20:39	16.39	7.9	161	99.7	9.64	7
WEHFB	Wheeler	TRM	277	Forebay	04/13/2001	8:21:37	17.17	8.18	161	105.1	10	5
WEHFB	Wheeler	TRM	277	Forebay	04/13/2001	8:22:30	18.59	8.47	157	108.6	10.04	3
WEHFB	Wheeler	TRM	277	Forebay	04/13/2001	8:23:31	18.75	8.45	154	108.5	9.99	1.5
WEHFB	Wheeler	TRM	277	Forebay	04/13/2001	8:24:10	19.21	8.53	148.5	109.8	10.02	0.3
WEHFB	Wheeler	TRM	277	Forebay	05/10/2001	9:14:54	19.01	7.29	205	27.6	2.54	12.9
WEHFB	Wheeler	TRM	277	Forebay	05/10/2001	9:15:47	19.06	7.19	202	29.1	2.67	12
WEHFB	Wheeler	TRM	277	Forebay	05/10/2001	9:18:18	20.22	7.29	186	53.1	4.77	11
WEHFB	Wheeler	TRM	277	Forebay	05/10/2001	9:19:05	22.47	7.41	165	67.8	5.83	10
WEHFB	Wheeler	TRM	277	Forebay	05/10/2001	9:20:36	22.76	7.83	166	87.2	7.46	9
WEHFB	Wheeler	TRM	277	Forebay	05/10/2001	9:21:19	22.86	7.93	163	91.2	7.78	8
WEHFB	Wheeler	TRM	277	Forebay	05/10/2001	9:22:24	23.12	8.21	164	100.8	8.56	6
WEHFB	Wheeler	TRM	277	Forebay	05/10/2001	9:23:15	23.16	8.3	161	101.7	8.63	4
WEHFB	Wheeler	TRM	277	Forebay	05/10/2001	9:23:55	23.17	8.32	162	102.9	8.73	3
WEHFB	Wheeler	TRM	277	Forebay	05/10/2001	9:24:46	23.25	8.39	161	105.9	8.97	1.5
WEHFB	Wheeler	TRM	277	Forebay	05/10/2001	9:25:28	23.4	8.4	162	106.7	9.01	0.3
WEHFB	Wheeler	TRM	277	Forebay	06/11/2001	14:24:14	22.93	7.32	205	54.6	4.71	14
WEHFB	Wheeler	TRM	277	Forebay	06/11/2001	14:24:54	23.16	7.31	197	58.5	5.03	12.9
WEHFB	Wheeler	TRM	277	Forebay	06/11/2001	14:25:25	24.54	7.26	154	63.6	5.34	11

WEHFB	Wheeler	TRM	277 Forebay	06/11/2001	14:25:58	24.69	7.26	154	67.2	5.62	9
WEHFB	Wheeler	TRM	277 Forebay	06/11/2001	14:26:30	25.12	7.33	149	78	6.46	7
WEHFB	Wheeler	TRM	277 Forebay	06/11/2001	14:27:00	25.27	7.4	151	81.4	6.73	5
WEHFB	Wheeler	TRM	277 Forebay	06/11/2001	14:27:49	25.65	7.78	148	94.8	7.78	3.9
WEHFB	Wheeler	TRM	277 Forebay	06/11/2001	14:28:20	26.08	8.35	149	104	8.47	3
WEHFB	Wheeler	TRM	277 Forebay	06/11/2001	14:29:10	26.9	9.04	148	135.9	10.9	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/11/2001	14:29:47	27.53	9.17	148	154.5	12.26	0.3
WEHFB	Wheeler	TRM	277 Forebay	06/14/2001	8:06:37	23.02	7.22	192	32.5	2.74	13.8
WEHFB	Wheeler	TRM	277 Forebay	06/14/2001	8:07:48	23.1	7.15	186	28.9	2.44	13
WEHFB	Wheeler	TRM	277 Forebay	06/14/2001	8:09:40	23.38	7.07	184	33.9	2.84	12
WEHFB	Wheeler	TRM	277 Forebay	06/14/2001	8:11:01	24.15	7.06	165	40.5	3.35	11
WEHFB	Wheeler	TRM	277 Forebay	06/14/2001	8:12:45	24.9	7.08	156	55.9	4.56	10
WEHFB	Wheeler	TRM	277 Forebay	06/14/2001	8:13:53	25.51	7.11	153	66.3	5.35	9
WEHFB	Wheeler	TRM	277 Forebay	06/14/2001	8:14:32	26.07	7.2	148.8	73.9	5.9	7
WEHFB	Wheeler	TRM	277 Forebay	06/14/2001	8:15:24	26.52	7.4	147.8	82.7	6.55	5
WEHFB	Wheeler	TRM	277 Forebay	06/14/2001	8:16:39	28.01	8.54	145.2	118.6	9.14	4
WEHFB	Wheeler	TRM	277 Forebay	06/14/2001	8:17:28	28.24	8.62	143.8	122	9.37	3
WEHFB	Wheeler	TRM	277 Forebay	06/14/2001	8:18:13	28.44	8.77	144.3	124.4	9.51	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/14/2001	8:18:59	28.69	8.95	144.9	134.9	10.28	0.3
WEHFB	Wheeler	TRM	277 Forebay	07/12/2001	8:06:10	25.57	7.2	205	10.9	0.88	12.9
WEHFB	Wheeler	TRM	277 Forebay	07/12/2001	8:07:04	26.46	7.13	193	11.2	0.88	12
WEHFB	Wheeler	TRM	277 Forebay	07/12/2001	8:08:58	27.44	7.11	176	21.8	1.7	11
WEHFB	Wheeler	TRM	277 Forebay	07/12/2001	8:10:02	28.45	7.11	168	43.6	3.33	10
WEHFB	Wheeler	TRM	277 Forebay	07/12/2001	8:11:54	28.57	7.14	165	49.2	3.75	9
WEHFB	Wheeler	TRM	277 Forebay	07/12/2001	8:12:37	28.82	7.18	169	59.4	4.51	8
WEHFB	Wheeler	TRM	277 Forebay	07/12/2001	8:13:45	29.02	7.28	170	67.1	5.08	7
WEHFB	Wheeler	TRM	277 Forebay	07/12/2001	8:14:43	29.19	7.44	167	79	5.95	6
WEHFB	Wheeler	TRM	277 Forebay	07/12/2001	8:16:10	29.41	7.99	170	98.8	7.42	5
WEHFB	Wheeler	TRM	277 Forebay	07/12/2001	8:16:55	29.46	8.16	173	103.6	7.77	4
WEHFB	Wheeler	TRM	277 Forebay	07/12/2001	8:17:28	29.5	8.26	171	106.4	7.98	3
WEHFB	Wheeler	TRM	277 Forebay	07/12/2001	8:18:18	29.55	8.4	169	110.2	8.26	1.5
WEHFB	Wheeler	TRM	277 Forebay	07/12/2001	8:19:44	29.58	8.42	170	111.8	8.38	0.3
WEHFB	Wheeler	TRM	277 Forebay	08/16/2001	8:48:33	26.94	7.2	180	22.4	1.76	14.3
WEHFB	Wheeler	TRM	277 Forebay	08/16/2001	8:49:22	26.96	7.12	183	21.8	1.72	14
WEHFB	Wheeler	TRM	277 Forebay	08/16/2001	8:51:05	27.64	7.09	168	41.9	3.25	13
WEHFB	Wheeler	TRM	277 Forebay	08/16/2001	8:51:46	27.86	7.11	164	51.6	3.99	12
WEHFB	Wheeler	TRM	277 Forebay	08/16/2001	8:52:27	28.01	7.12	165	60.3	4.65	10

WEHFB	Wheeler	TRM	277	Forebay	08/16/2001	8:53:22	28.35	7.15	175	56.1	4.3	8
WEHFB	Wheeler	TRM	277	Forebay	08/16/2001	8:55:00	28.86	7.65	173	88.7	6.75	7
WEHFB	Wheeler	TRM	277	Forebay	08/16/2001	8:55:41	28.98	8.06	173	104.6	7.94	6
WEHFB	Wheeler	TRM	277	Forebay	08/16/2001	8:56:51	29.06	8.31	170	112.5	8.52	4
WEHFB	Wheeler	TRM	277	Forebay	08/16/2001	8:57:53	29.07	8.33	173	113.3	8.58	3
WEHFB	Wheeler	TRM	277	Forebay	08/16/2001	8:58:52	29.07	8.37	174	113.4	8.59	1.5
WEHFB	Wheeler	TRM	277	Forebay	08/16/2001	8:59:36	29.08	8.39	173	114.1	8.64	0.3
WEHFB	Wheeler	TRM	277	Forebay	09/13/2001	8:28:21	26.69	7.45	188	69.4	5.51	13.1
WEHFB	Wheeler	TRM	277	Forebay	09/13/2001	8:29:20	26.78	7.37	191	70.2	5.56	12
WEHFB	Wheeler	TRM	277	Forebay	09/13/2001	8:29:58	26.81	7.39	191	71.8	5.69	10
WEHFB	Wheeler	TRM	277	Forebay	09/13/2001	8:30:39	26.87	7.4	193	74.8	5.92	8
WEHFB	Wheeler	TRM	277	Forebay	09/13/2001	8:32:06	27.23	7.55	192	84.1	6.6	7
WEHFB	Wheeler	TRM	277	Forebay	09/13/2001	8:33:15	27.42	7.84	193	101.1	7.92	6
WEHFB	Wheeler	TRM	277	Forebay	09/13/2001	8:33:53	27.47	7.97	193	106.5	8.33	5
WEHFB	Wheeler	TRM	277	Forebay	09/13/2001	8:34:44	27.5	8.04	198	108.6	8.49	4
WEHFB	Wheeler	TRM	277	Forebay	09/13/2001	8:35:30	27.51	8.06	196	109.1	8.52	3
WEHFB	Wheeler	TRM	277	Forebay	09/13/2001	8:36:18	27.54	8.11	196	110.9	8.66	1.5
WEHFB	Wheeler	TRM	277	Forebay	09/13/2001	8:36:58	27.55	8.12	194	112	8.75	0.3
WEHFB	Wheeler	TRM	277	Forebay	10/15/2001	8:36:18	17.38	7.96	210	94.7	9	13
WEHFB	Wheeler	TRM	277	Forebay	10/15/2001	8:37:10	17.37	7.95	210	95.7	9.1	11
WEHFB	Wheeler	TRM	277	Forebay	10/15/2001	8:37:55	17.36	7.96	208	95.8	9.11	9
WEHFB	Wheeler	TRM	277	Forebay	10/15/2001	8:38:34	17.37	7.96	209	95.7	9.1	7
WEHFB	Wheeler	TRM	277	Forebay	10/15/2001	8:39:18	17.27	7.95	210	96	9.14	5
WEHFB	Wheeler	TRM	277	Forebay	10/15/2001	8:39:59	17.46	7.96	208	95.1	9.03	4
WEHFB	Wheeler	TRM	277	Forebay	10/15/2001	8:41:08	17.28	7.95	208	95.9	9.14	3
WEHFB	Wheeler	TRM	277	Forebay	10/15/2001	8:42:09	17.27	7.95	208	95.7	9.12	1.5
WEHFB	Wheeler	TRM	277	Forebay	10/15/2001	8:42:52	17.25	7.95	213	95.6	9.11	0.3
WEHFB	Wheeler	TRM	277	Forebay	04/15/2002	9:13:48	15.07	7.24	157	76.1	7.57	13.8
WEHFB	Wheeler	TRM	277	Forebay	04/15/2002	9:14:51	15.45	7.29	155	82.4	8.13	13
WEHFB	Wheeler	TRM	277	Forebay	04/15/2002	9:16:06	15.62	7.32	157	83.7	8.23	11
WEHFB	Wheeler	TRM	277	Forebay	04/15/2002	9:16:58	16.06	7.34	154	85.9	8.36	9
WEHFB	Wheeler	TRM	277	Forebay	04/15/2002	9:17:38	17.09	7.47	145.8	93.8	8.94	7
WEHFB	Wheeler	TRM	277	Forebay	04/15/2002	9:18:20	17.63	7.69	150	102.4	9.65	5
WEHFB	Wheeler	TRM	277	Forebay	04/15/2002	9:19:09	17.86	7.85	149.6	107.3	10.06	3
WEHFB	Wheeler	TRM	277	Forebay	04/15/2002	9:19:56	18.15	8.34	147.8	119	11.09	1.5
WEHFB	Wheeler	TRM	277	Forebay	04/15/2002	9:20:34	19.18	8.62	146.6	130.7	11.93	0.3
WEHFB	Wheeler	TRM	277	Forebay	05/14/2002	9:43:17	20.81	7.33	202	63.7	5.64	13.5

WEHFB	Wheeler	TRM	277 Forebay	05/14/2002	9:43:53	20.85	7.33	205	63.7	5.64	13
WEHFB	Wheeler	TRM	277 Forebay	05/14/2002	9:44:20	20.84	7.34	200	63.2	5.6	11
WEHFB	Wheeler	TRM	277 Forebay	05/14/2002	9:45:47	21.23	7.41	185	73.6	6.46	10
WEHFB	Wheeler	TRM	277 Forebay	05/14/2002	9:46:22	21.42	7.45	177	77.4	6.78	9
WEHFB	Wheeler	TRM	277 Forebay	05/14/2002	9:47:14	21.55	7.5	171	81.1	7.09	7
WEHFB	Wheeler	TRM	277 Forebay	05/14/2002	9:47:49	21.67	7.54	166	86.1	7.5	5
WEHFB	Wheeler	TRM	277 Forebay	05/14/2002	9:48:27	21.89	7.54	163	87.2	7.56	3
WEHFB	Wheeler	TRM	277 Forebay	05/14/2002	9:49:06	21.95	7.58	162	88.3	7.65	1.5
WEHFB	Wheeler	TRM	277 Forebay	05/14/2002	9:49:51	22	7.61	160	88.6	7.67	0.3
WEHFB	Wheeler	TRM	277 Forebay	06/10/2002	10:32:20	22.35	7.05	205	7.8	0.67	13.2
WEHFB	Wheeler	TRM	277 Forebay	06/10/2002	10:33:08	22.38	6.97	203	6.7	0.58	13
WEHFB	Wheeler	TRM	277 Forebay	06/10/2002	10:34:33	23.67	6.98	194	13.3	1.11	12
WEHFB	Wheeler	TRM	277 Forebay	06/10/2002	10:35:32	26.6	7.13	158	48.4	3.84	11
WEHFB	Wheeler	TRM	277 Forebay	06/10/2002	10:37:25	27.02	7.27	161	60.8	4.78	10
WEHFB	Wheeler	TRM	277 Forebay	06/10/2002	10:38:18	27.29	7.61	157	77.7	6.08	9
WEHFB	Wheeler	TRM	277 Forebay	06/10/2002	10:39:10	27.42	7.96	158	89.7	7	7
WEHFB	Wheeler	TRM	277 Forebay	06/10/2002	10:40:16	27.54	8.09	152	93.6	7.29	5
WEHFB	Wheeler	TRM	277 Forebay	06/10/2002	10:41:06	27.81	8.35	156	100.4	7.79	3
WEHFB	Wheeler	TRM	277 Forebay	06/10/2002	10:41:48	28.21	8.75	153	125	9.63	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/10/2002	10:42:41	28.52	8.69	155	126.1	9.65	0.3
WEHFB	Wheeler	TRM	277 Forebay	07/15/2002	9:39:43	27.75	7	137.4	34.9	2.71	13
WEHFB	Wheeler	TRM	277 Forebay	07/15/2002	9:40:24	27.88	7.01	138.4	38.5	2.98	12
WEHFB	Wheeler	TRM	277 Forebay	07/15/2002	9:41:20	29.04	7.34	153	64.7	4.91	11
WEHFB	Wheeler	TRM	277 Forebay	07/15/2002	9:41:59	29.27	7.45	158	70.9	5.35	10
WEHFB	Wheeler	TRM	277 Forebay	07/15/2002	9:42:40	29.54	7.6	162	78.6	5.91	8
WEHFB	Wheeler	TRM	277 Forebay	07/15/2002	9:43:22	29.55	7.6	157	78.5	5.9	6
WEHFB	Wheeler	TRM	277 Forebay	07/15/2002	9:44:18	29.56	7.65	162	79.8	6	4
WEHFB	Wheeler	TRM	277 Forebay	07/15/2002	9:44:58	29.59	7.77	167	82.9	6.23	3
WEHFB	Wheeler	TRM	277 Forebay	07/15/2002	9:45:41	29.71	8.4	162	105.5	7.91	1.5
WEHFB	Wheeler	TRM	277 Forebay	07/15/2002	9:46:21	30.32	8.27	163	102.3	7.59	0.3
WEHFB	Wheeler	TRM	277 Forebay	08/12/2002	9:40:08	29.85	7.05	171	22.3	1.67	12.7
WEHFB	Wheeler	TRM	277 Forebay	08/12/2002	9:41:07	29.88	7.1	168	35.9	2.69	12
WEHFB	Wheeler	TRM	277 Forebay	08/12/2002	9:41:56	29.96	7.07	175	27.7	2.07	10
WEHFB	Wheeler	TRM	277 Forebay	08/12/2002	9:43:52	30.03	7.1	171	35.3	2.64	9
WEHFB	Wheeler	TRM	277 Forebay	08/12/2002	9:44:39	30.11	7.19	171	47.7	3.56	8
WEHFB	Wheeler	TRM	277 Forebay	08/12/2002	9:46:28	30.15	7.37	166	65.8	4.9	7
WEHFB	Wheeler	TRM	277 Forebay	08/12/2002	9:47:11	30.17	7.42	165	72.4	5.39	6

WEHFB	Wheeler	TRM	277	Forebay	08/12/2002	9:47:57	30.27	7.54	166	81	6.03	4
WEHFB	Wheeler	TRM	277	Forebay	08/12/2002	9:48:33	30.32	7.63	166	85.4	6.35	3
WEHFB	Wheeler	TRM	277	Forebay	08/12/2002	9:49:19	30.44	7.76	168	89.9	6.67	1.5
WEHFB	Wheeler	TRM	277	Forebay	08/12/2002	9:49:51	30.75	8.16	165	105.2	7.76	0.3
WEHFB	Wheeler	TRM	277	Forebay	09/09/2002	10:02:45	28.83	7.12	187	30	2.29	13.4
WEHFB	Wheeler	TRM	277	Forebay	09/09/2002	10:03:43	28.85	7.12	186	30.8	2.35	13
WEHFB	Wheeler	TRM	277	Forebay	09/09/2002	10:04:43	28.88	7.11	190	30.1	2.3	11
WEHFB	Wheeler	TRM	277	Forebay	09/09/2002	10:05:23	28.91	7.11	185	28.9	2.2	9
WEHFB	Wheeler	TRM	277	Forebay	09/09/2002	10:05:58	29.06	7.32	180	66.2	5.03	7
WEHFB	Wheeler	TRM	277	Forebay	09/09/2002	10:06:44	29.09	7.46	180	71.9	5.46	5
WEHFB	Wheeler	TRM	277	Forebay	09/09/2002	10:07:28	29.12	7.56	178	78.2	5.94	3
WEHFB	Wheeler	TRM	277	Forebay	09/09/2002	10:08:11	29.18	7.66	179	82.2	6.23	1.5
WEHFB	Wheeler	TRM	277	Forebay	09/09/2002	10:08:49	29.69	8.09	179	97.3	7.31	0.3
WEHFB	Wheeler	TRM	277	Forebay	10/07/2002	10:39:25	24.43	7.54	183	78.8	6.51	12.4
WEHFB	Wheeler	TRM	277	Forebay	10/07/2002	10:40:19	24.58	7.5	183	77.8	6.41	12
WEHFB	Wheeler	TRM	277	Forebay	10/07/2002	10:40:58	24.61	7.53	184	79.8	6.56	10
WEHFB	Wheeler	TRM	277	Forebay	10/07/2002	10:41:37	24.66	7.53	184	79.8	6.56	8
WEHFB	Wheeler	TRM	277	Forebay	10/07/2002	10:42:22	24.71	7.64	186	86.7	7.12	6
WEHFB	Wheeler	TRM	277	Forebay	10/07/2002	10:43:01	24.71	7.68	185	88.3	7.25	4
WEHFB	Wheeler	TRM	277	Forebay	10/07/2002	10:43:48	24.72	7.75	189	90.9	7.46	3
WEHFB	Wheeler	TRM	277	Forebay	10/07/2002	10:44:43	24.72	7.74	185	89.8	7.37	1.5
WEHFB	Wheeler	TRM	277	Forebay	10/07/2002	10:45:36	24.72	7.77	182	91.2	7.49	0.3
WEHFB	Wheeler	TRM	277	Forebay	04/07/2003	11:30:00	17.54	8.64	180	118	11.09	0.3
WEHFB	Wheeler	TRM	277	Forebay	04/07/2003	11:30:00	17.29	8.61	181	115.4	10.9	1.5
WEHFB	Wheeler	TRM	277	Forebay	04/07/2003	11:30:00	17.17	8.6	182	115	10.89	3
WEHFB	Wheeler	TRM	277	Forebay	04/07/2003	11:30:00	17.15	8.59	181	114.6	10.85	4
WEHFB	Wheeler	TRM	277	Forebay	04/07/2003	11:30:00	17.12	8.56	181	113.8	10.79	6
WEHFB	Wheeler	TRM	277	Forebay	04/07/2003	11:30:00	16.45	8.12	179	100.6	9.67	8
WEHFB	Wheeler	TRM	277	Forebay	04/07/2003	11:30:00	15.99	7.86	188	95.2	9.24	10
WEHFB	Wheeler	TRM	277	Forebay	04/07/2003	11:30:00	15.9	7.81	190	94.3	9.17	12
WEHFB	Wheeler	TRM	277	Forebay	05/28/2003	11:05:00	22.12	7.42	130.8	100.8	8.69	0.3
WEHFB	Wheeler	TRM	277	Forebay	05/28/2003	11:05:00	22.01	7.36	130.4	99.9	8.64	1.5
WEHFB	Wheeler	TRM	277	Forebay	05/28/2003	11:05:00	21.75	7.29	130.8	97	8.43	3
WEHFB	Wheeler	TRM	277	Forebay	05/28/2003	11:05:00	21.46	7.22	130.8	92.5	8.08	4
WEHFB	Wheeler	TRM	277	Forebay	05/28/2003	11:05:00	21.28	7.17	130.9	90.9	7.97	6
WEHFB	Wheeler	TRM	277	Forebay	05/28/2003	11:05:00	20.94	7.07	131.7	80	7.06	8
WEHFB	Wheeler	TRM	277	Forebay	05/28/2003	11:05:00	20.96	7.04	132.4	81.9	7.23	10

WEHFB	Wheeler	TRM	277 Forebay	05/28/2003	11:05:00	20.8	6.98	130.7	73.5	6.5	12
WEHFB	Wheeler	TRM	277 Forebay	05/28/2003	11:05:00	20.74	7.02	130.1	72.1	6.39	12.8
WEHFB	Wheeler	TRM	277 Forebay	06/24/2003	9:54:16	26.2	7.26	138.9	71.8	5.73	12.1
WEHFB	Wheeler	TRM	277 Forebay	06/24/2003	9:55:31	26.26	7.3	142.2	84.5	6.74	11
WEHFB	Wheeler	TRM	277 Forebay	06/24/2003	9:56:25	26.39	7.42	141.4	96.7	7.69	9
WEHFB	Wheeler	TRM	277 Forebay	06/24/2003	9:58:31	26.45	7.51	141	101.5	8.06	7
WEHFB	Wheeler	TRM	277 Forebay	06/24/2003	9:59:04	26.52	7.54	140.6	102.6	8.14	5
WEHFB	Wheeler	TRM	277 Forebay	06/24/2003	9:59:30	26.54	7.56	140	102.3	8.11	3
WEHFB	Wheeler	TRM	277 Forebay	06/24/2003	10:00:08	27.02	7.84	139.4	111.1	8.74	1.5
WEHFB	Wheeler	TRM	277 Forebay	06/24/2003	10:00:55	28.33	8.93	137	164.3	12.62	0.3
WEHFB	Wheeler	TRM	277 Forebay	07/10/2003	10:57:38	26.31	6.99	197	43.4	3.45	13.1
WEHFB	Wheeler	TRM	277 Forebay	07/10/2003	10:58:22	27.44	6.98	164	62.5	4.87	12
WEHFB	Wheeler	TRM	277 Forebay	07/10/2003	10:58:53	27.47	6.98	158	62.9	4.9	10
WEHFB	Wheeler	TRM	277 Forebay	07/10/2003	10:59:27	27.65	7.05	156	73.5	5.71	8
WEHFB	Wheeler	TRM	277 Forebay	07/10/2003	11:00:14	27.95	7.32	157	92.4	7.14	6
WEHFB	Wheeler	TRM	277 Forebay	07/10/2003	11:00:50	28.31	7.8	156	108.6	8.33	4
WEHFB	Wheeler	TRM	277 Forebay	07/10/2003	11:01:29	28.47	8.07	153	116.6	8.92	3
WEHFB	Wheeler	TRM	277 Forebay	07/10/2003	11:01:56	28.56	8.24	153	121.3	9.27	1.5
WEHFB	Wheeler	TRM	277 Forebay	07/10/2003	11:02:32	28.56	8.29	156	121.8	9.3	0.3
WEHFB	Wheeler	TRM	277 Forebay	08/25/2003	10:32:01	28.93	6.83	196	6.4	0.49	13.6
WEHFB	Wheeler	TRM	277 Forebay	08/25/2003	10:32:41	29.1	6.79	190	8.3	0.63	13
WEHFB	Wheeler	TRM	277 Forebay	08/25/2003	10:33:31	29.65	6.78	175	23.8	1.79	11
WEHFB	Wheeler	TRM	277 Forebay	08/25/2003	10:34:18	29.87	6.87	172	52.2	3.9	9
WEHFB	Wheeler	TRM	277 Forebay	08/25/2003	10:34:51	30.01	7.24	165	94.8	7.08	7
WEHFB	Wheeler	TRM	277 Forebay	08/25/2003	10:35:35	30.04	7.48	168	100.4	7.49	5
WEHFB	Wheeler	TRM	277 Forebay	08/25/2003	10:36:08	30.2	7.57	166	101	7.52	3
WEHFB	Wheeler	TRM	277 Forebay	08/25/2003	10:36:42	30.24	7.85	167	110.3	8.21	1.5
WEHFB	Wheeler	TRM	277 Forebay	08/25/2003	10:37:30	30.48	7.99	166	114	8.44	0.3
WEHFB	Wheeler	TRM	277 Forebay	09/10/2003	11:26:40	27.88	7.42	173	90.9	7.05	13
WEHFB	Wheeler	TRM	277 Forebay	09/10/2003	11:27:22	27.98	7.4	168	90.3	6.99	11
WEHFB	Wheeler	TRM	277 Forebay	09/10/2003	11:27:52	28.05	7.43	169	91.6	7.09	9
WEHFB	Wheeler	TRM	277 Forebay	09/10/2003	11:28:21	28.09	7.4	170	87.5	6.76	7
WEHFB	Wheeler	TRM	277 Forebay	09/10/2003	11:28:50	28.15	7.47	169	93.1	7.18	5
WEHFB	Wheeler	TRM	277 Forebay	09/10/2003	11:29:19	28.24	7.5	169	93.7	7.22	3
WEHFB	Wheeler	TRM	277 Forebay	09/10/2003	11:30:08	28.36	7.54	169	95.2	7.32	1.5
WEHFB	Wheeler	TRM	277 Forebay	09/10/2003	11:30:37	28.39	7.55	169	95.2	7.32	0.3
WEHFB	Wheeler	TRM	277 Forebay	10/08/2003	11:11:12	21.46	7.35	167	76.7	6.7	13.4

WEHFB	Wheeler	TRM	277	Forebay	10/08/2003	11:12:00	21.45	7.29	167	75.4	6.59	13
WEHFB	Wheeler	TRM	277	Forebay	10/08/2003	11:12:35	21.45	7.27	165	74.8	6.53	11
WEHFB	Wheeler	TRM	277	Forebay	10/08/2003	11:13:16	21.61	7.29	167	79.7	6.94	9
WEHFB	Wheeler	TRM	277	Forebay	10/08/2003	11:13:48	21.73	7.32	169	81.7	7.1	7
WEHFB	Wheeler	TRM	277	Forebay	10/08/2003	11:14:16	22.05	7.34	170	87.3	7.54	5
WEHFB	Wheeler	TRM	277	Forebay	10/08/2003	11:14:54	22.08	7.39	171	88.5	7.64	3
WEHFB	Wheeler	TRM	277	Forebay	10/08/2003	11:15:45	22.16	7.5	172	92.3	7.95	1.5
WEHFB	Wheeler	TRM	277	Forebay	10/08/2003	11:16:35	22.66	7.66	167	101.8	8.69	0.3
WEHFB	Wheeler	TRM	277	Forebay	04/06/2004	9:21:20	15.05	7.78	165	107.2	10.67	11.8
WEHFB	Wheeler	TRM	277	Forebay	04/06/2004	9:22:32	15.01	7.79	164	118.8	11.82	11
WEHFB	Wheeler	TRM	277	Forebay	04/06/2004	9:23:17	15.06	7.79	165	112.2	11.16	9
WEHFB	Wheeler	TRM	277	Forebay	04/06/2004	9:24:08	15.14	7.79	166	111.9	11.12	7
WEHFB	Wheeler	TRM	277	Forebay	04/06/2004	9:25:04	15.2	7.79	169	111	11.01	5
WEHFB	Wheeler	TRM	277	Forebay	04/06/2004	9:25:49	15.34	7.84	166	115.2	11.39	3
WEHFB	Wheeler	TRM	277	Forebay	04/06/2004	9:26:33	15.83	8	168	120	11.74	1.5
WEHFB	Wheeler	TRM	277	Forebay	04/06/2004	9:27:13	16.65	8.03	165	115.3	11.09	0.3
WEHFB	Wheeler	TRM	277	Forebay	05/04/2004	11:10:30	19.45	7.45	178	78.8	7.17	12.8
WEHFB	Wheeler	TRM	277	Forebay	05/04/2004	11:11:19	19.55	7.44	179	80.1	7.28	12
WEHFB	Wheeler	TRM	277	Forebay	05/04/2004	11:11:52	19.67	7.44	175	79.4	7.2	10
WEHFB	Wheeler	TRM	277	Forebay	05/04/2004	11:12:26	19.75	7.44	179	80.4	7.27	8
WEHFB	Wheeler	TRM	277	Forebay	05/04/2004	11:13:00	19.81	7.46	176	81.4	7.35	6
WEHFB	Wheeler	TRM	277	Forebay	05/04/2004	11:13:35	19.87	7.49	178	81.8	7.39	4
WEHFB	Wheeler	TRM	277	Forebay	05/04/2004	11:13:57	19.97	7.5	179	83.2	7.49	3
WEHFB	Wheeler	TRM	277	Forebay	05/04/2004	11:14:26	20.12	7.52	179	84.2	7.57	1.5
WEHFB	Wheeler	TRM	277	Forebay	05/04/2004	11:14:56	20.46	7.55	180	87	7.76	0.3
WEHFB	Wheeler	TRM	277	Forebay	06/08/2004	11:09:15	26.23	7.17	171	31	2.48	12.6
WEHFB	Wheeler	TRM	277	Forebay	06/08/2004	11:10:58	26.29	7.01	168	31.5	2.52	12
WEHFB	Wheeler	TRM	277	Forebay	06/08/2004	11:12:32	26.42	7.03	169	42.3	3.38	11
WEHFB	Wheeler	TRM	277	Forebay	06/08/2004	11:13:36	26.55	7.09	168	53.1	4.23	10
WEHFB	Wheeler	TRM	277	Forebay	06/08/2004	11:15:04	26.81	7.39	168	77.2	6.12	9
WEHFB	Wheeler	TRM	277	Forebay	06/08/2004	11:15:57	26.96	7.72	170	90.7	7.17	8
WEHFB	Wheeler	TRM	277	Forebay	06/08/2004	11:17:15	27.05	8.01	172	101.4	8.01	7
WEHFB	Wheeler	TRM	277	Forebay	06/08/2004	11:17:49	27.09	8.13	169	106.1	8.37	6
WEHFB	Wheeler	TRM	277	Forebay	06/08/2004	11:18:20	27.22	8.27	170	110	8.66	4
WEHFB	Wheeler	TRM	277	Forebay	06/08/2004	11:18:51	27.26	8.38	172	114.8	9.02	3
WEHFB	Wheeler	TRM	277	Forebay	06/08/2004	11:19:40	27.48	8.63	165	130	10.19	1.5
WEHFB	Wheeler	TRM	277	Forebay	06/08/2004	11:20:19	28.84	8.65	165	128.7	9.85	0.3

WEHFB	Wheeler	TRM	277	Forebay	07/14/2004	13:16:00	26.8	7.1	204		4.3	11.8
WEHFB	Wheeler	TRM	277	Forebay	07/14/2004	13:17:00	27.1	7	204		4.2	11
WEHFB	Wheeler	TRM	277	Forebay	07/14/2004	13:18:00	28.4	7	191		4.4	9
WEHFB	Wheeler	TRM	277	Forebay	07/14/2004	13:19:00	29.1	7.2	191		6.6	8
WEHFB	Wheeler	TRM	277	Forebay	07/14/2004	13:20:00	29.2	7.2	195		7.1	7
WEHFB	Wheeler	TRM	277	Forebay	07/14/2004	13:21:00	29.3	7.7	190		7.7	6
WEHFB	Wheeler	TRM	277	Forebay	07/14/2004	13:22:00	29.4	7.8	190		8.1	5
WEHFB	Wheeler	TRM	277	Forebay	07/14/2004	13:23:00	29.7	8.1	186		8.8	4
WEHFB	Wheeler	TRM	277	Forebay	07/14/2004	13:24:00	29.9	8.1	189		9.4	3
WEHFB	Wheeler	TRM	277	Forebay	07/14/2004	13:25:00	30.1	8.2	189		10	1.5
WEHFB	Wheeler	TRM	277	Forebay	07/14/2004	13:26:00	30.2	8.2	189		10	0.3
WEHFB	Wheeler	TRM	277	Forebay	08/11/2004	12:33:45	28.23	7.11	193	20.7	1.59	13.3
WEHFB	Wheeler	TRM	277	Forebay	08/11/2004	12:34:18	28.26	7.06	193	22.4	1.72	13
WEHFB	Wheeler	TRM	277	Forebay	08/11/2004	12:35:21	28.44	7.08	188	37.7	2.88	12
WEHFB	Wheeler	TRM	277	Forebay	08/11/2004	12:36:25	28.44	7.06	186	38.4	2.93	11
WEHFB	Wheeler	TRM	277	Forebay	08/11/2004	12:37:11	28.51	7.08	183	47.4	3.62	9
WEHFB	Wheeler	TRM	277	Forebay	08/11/2004	12:38:15	28.58	7.2	189	59.3	4.52	8
WEHFB	Wheeler	TRM	277	Forebay	08/11/2004	12:39:13	28.69	7.45	188	85.8	6.52	7
WEHFB	Wheeler	TRM	277	Forebay	08/11/2004	12:40:02	28.74	7.72	189	95.6	7.27	5
WEHFB	Wheeler	TRM	277	Forebay	08/11/2004	12:40:42	28.82	7.88	190	98.8	7.49	3
WEHFB	Wheeler	TRM	277	Forebay	08/11/2004	12:41:26	29.02	8.09	188	109.2	8.26	1.5
WEHFB	Wheeler	TRM	277	Forebay	08/11/2004	12:41:59	29.48	8.15	188	109.3	8.2	0.3
WEHFB	Wheeler	TRM	277	Forebay	09/08/2004	14:25:48	26.52	7.11	207	32.4	2.55	13
WEHFB	Wheeler	TRM	277	Forebay	09/08/2004	14:26:16	26.6	7.05	204	41.6	3.26	12
WEHFB	Wheeler	TRM	277	Forebay	09/08/2004	14:27:00	26.62	7.04	203	46.5	3.65	10
WEHFB	Wheeler	TRM	277	Forebay	09/08/2004	14:27:41	26.68	7.06	204	61.6	4.82	8
WEHFB	Wheeler	TRM	277	Forebay	09/08/2004	14:28:13	26.74	7.14	200	75.7	5.92	6
WEHFB	Wheeler	TRM	277	Forebay	09/08/2004	14:28:54	26.82	7.22	200	83.6	6.53	4
WEHFB	Wheeler	TRM	277	Forebay	09/08/2004	14:29:32	26.85	7.28	198	85.8	6.7	3
WEHFB	Wheeler	TRM	277	Forebay	09/08/2004	14:30:19	27.02	7.33	200	86.9	6.76	1.5
WEHFB	Wheeler	TRM	277	Forebay	09/08/2004	14:30:54	27.67	7.38	198	88.9	6.84	0.3
WEHFB	Wheeler	TRM	277	Forebay	10/06/2004	13:17:54	23.03	7.65	164	85.9	7.33	12.1
WEHFB	Wheeler	TRM	277	Forebay	10/06/2004	13:18:55	23.12	7.52	164	87.6	7.45	11
WEHFB	Wheeler	TRM	277	Forebay	10/06/2004	13:19:31	23.15	7.5	159	89.8	7.64	9
WEHFB	Wheeler	TRM	277	Forebay	10/06/2004	13:20:49	23.17	7.46	164	89	7.57	7
WEHFB	Wheeler	TRM	277	Forebay	10/06/2004	13:21:19	23.23	7.46	164	89.9	7.63	5
WEHFB	Wheeler	TRM	277	Forebay	10/06/2004	13:22:00	23.54	7.47	163	92.3	7.79	3

WEHFB	Wheeler	TRM	277	Forebay	10/06/2004	13:22:49	23.94	7.66	164	108.1	9.06	1.5
WEHFB	Wheeler	TRM	277	Forebay	10/06/2004	13:23:18	24.27	7.73	163	109.6	9.13	0.3
WEHFB	Wheeler	TRM	277	Forebay	04/11/2005	9:39:23	16.29	7.64	147	76.8	7.39	13.3
WEHFB	Wheeler	TRM	277	Forebay	04/11/2005	9:40:30	16.48	7.57	148.3	76	7.29	11
WEHFB	Wheeler	TRM	277	Forebay	04/11/2005	9:41:12	17.33	7.52	160	84.2	7.93	9
WEHFB	Wheeler	TRM	277	Forebay	04/11/2005	9:41:44	17.38	7.53	164	85.1	8.01	7
WEHFB	Wheeler	TRM	277	Forebay	04/11/2005	9:42:22	17.46	7.54	154	85.5	8.03	5
WEHFB	Wheeler	TRM	277	Forebay	04/11/2005	9:43:00	17.5	7.54	157	85.9	8.06	3
WEHFB	Wheeler	TRM	277	Forebay	04/11/2005	9:43:40	17.55	7.54	159	85.5	8.02	1.5
WEHFB	Wheeler	TRM	277	Forebay	04/11/2005	9:44:27	18.69	7.64	159	101.6	9.31	0.3
WEHFB	Wheeler	TRM	277	Forebay	05/03/2005	13:26:45	17.81	7.77	163	84.1	7.9	13.6
WEHFB	Wheeler	TRM	277	Forebay	05/03/2005	13:27:23	17.8	7.71	157	83.1	7.82	13
WEHFB	Wheeler	TRM	277	Forebay	05/03/2005	13:28:15	17.8	7.67	157	86.4	8.12	11
WEHFB	Wheeler	TRM	277	Forebay	05/03/2005	13:28:48	17.91	7.65	157	82.8	7.77	9
WEHFB	Wheeler	TRM	277	Forebay	05/03/2005	13:29:26	17.99	7.63	157	84.6	7.92	7
WEHFB	Wheeler	TRM	277	Forebay	05/03/2005	13:29:52	18.05	7.64	160	85.6	8.01	5
WEHFB	Wheeler	TRM	277	Forebay	05/03/2005	13:30:29	18.52	7.66	158	89.9	8.33	3
WEHFB	Wheeler	TRM	277	Forebay	05/03/2005	13:31:15	19.41	7.66	157	92.6	8.43	1.5
WEHFB	Wheeler	TRM	277	Forebay	05/03/2005	13:32:06	19.89	7.69	161	92.6	8.34	0.3
WEHFB	Wheeler	TRM	277	Forebay	06/08/2005	12:40:51	23.29	7.73	175	51.9	4.34	13.4
WEHFB	Wheeler	TRM	277	Forebay	06/08/2005	12:41:20	23.31	7.62	171	52.6	4.4	13
WEHFB	Wheeler	TRM	277	Forebay	06/08/2005	12:42:01	23.35	7.52	173	52.7	4.41	11
WEHFB	Wheeler	TRM	277	Forebay	06/08/2005	12:42:45	24.65	7.44	153	55.4	4.52	9
WEHFB	Wheeler	TRM	277	Forebay	06/08/2005	12:43:52	25.98	8.35	152	111.3	8.86	7
WEHFB	Wheeler	TRM	277	Forebay	06/08/2005	12:44:51	25.42	8.04	159	91.1	7.33	8
WEHFB	Wheeler	TRM	277	Forebay	06/08/2005	12:46:02	26.43	8.85	158	131.8	10.41	5
WEHFB	Wheeler	TRM	277	Forebay	06/08/2005	12:46:42	26.14	8.73	156	118.8	9.43	6
WEHFB	Wheeler	TRM	277	Forebay	06/08/2005	12:47:39	26.51	8.89	157	133.4	10.52	3
WEHFB	Wheeler	TRM	277	Forebay	06/08/2005	12:48:26	26.86	9.03	153	146.4	11.47	1.5
WEHFB	Wheeler	TRM	277	Forebay	06/08/2005	12:49:31	28.42	8.95	154	143.9	10.97	0.3
WEHFB	Wheeler	TRM	277	Forebay	07/13/2005	12:37:00	27.41	7.53	166	58	4.51	11.1
WEHFB	Wheeler	TRM	277	Forebay	07/13/2005	12:37:35	27.41	7.51	164	59.5	4.63	11
WEHFB	Wheeler	TRM	277	Forebay	07/13/2005	12:38:03	27.41	7.51	163	61.4	4.77	9
WEHFB	Wheeler	TRM	277	Forebay	07/13/2005	12:38:37	27.51	7.49	159	62	4.82	7
WEHFB	Wheeler	TRM	277	Forebay	07/13/2005	12:39:26	27.53	7.47	165	62.9	4.89	5
WEHFB	Wheeler	TRM	277	Forebay	07/13/2005	12:40:08	27.87	7.48	166	63.9	4.93	3
WEHFB	Wheeler	TRM	277	Forebay	07/13/2005	12:40:42	28.01	7.51	163	66.3	5.1	1.5

WEHFB	Wheeler	TRM	277	Forebay	07/13/2005	12:41:19	28.08	7.54	168	69	5.3	0.3
WEHFB	Wheeler	TRM	277	Forebay	08/10/2005	10:51:32	29.86	7.09	167	11.7	0.87	13.3
WEHFB	Wheeler	TRM	277	Forebay	08/10/2005	10:52:11	29.91	7.05	162	14.5	1.08	13
WEHFB	Wheeler	TRM	277	Forebay	08/10/2005	10:52:56	30.06	7.08	155	32	2.38	11
WEHFB	Wheeler	TRM	277	Forebay	08/10/2005	10:53:35	29.96	7.01	160	18.3	1.36	12
WEHFB	Wheeler	TRM	277	Forebay	08/10/2005	10:54:43	30.1	7.07	153	37.9	2.81	10
WEHFB	Wheeler	TRM	277	Forebay	08/10/2005	10:55:10	30.13	7.08	149	40.5	3.01	9
WEHFB	Wheeler	TRM	277	Forebay	08/10/2005	10:55:57	30.32	7.11	151	47.9	3.55	7
WEHFB	Wheeler	TRM	277	Forebay	08/10/2005	10:56:30	30.33	7.12	155	49.1	3.63	6
WEHFB	Wheeler	TRM	277	Forebay	08/10/2005	10:57:10	30.46	7.23	153	62.1	4.58	5
WEHFB	Wheeler	TRM	277	Forebay	08/10/2005	10:58:12	30.54	7.41	150	76.9	5.67	4
WEHFB	Wheeler	TRM	277	Forebay	08/10/2005	10:58:42	30.66	7.55	150	83.5	6.14	3
WEHFB	Wheeler	TRM	277	Forebay	08/10/2005	10:59:15	30.85	7.84	146	92.7	6.79	1.5
WEHFB	Wheeler	TRM	277	Forebay	08/10/2005	10:59:48	31.66	8.12	149.5	103.5	7.48	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	01/24/1992	10:00:00	6.5	7.88	155		11.1	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	01/24/1992	10:01:00	6.5	7.88	155		11.1	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	01/24/1992	10:02:00	6.5	7.88	155		11.1	4
WEHTZ	Wheeler	TRM	295.9	Transition	01/24/1992	10:04:00	6.5	7.88	155		11.1	6
WEHTZ	Wheeler	TRM	295.9	Transition	01/24/1992	10:05:00	6.5	7.88	155		11.1	8
WEHTZ	Wheeler	TRM	295.9	Transition	04/22/1992	8:15:00	18.9	7.64	157		8.5	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	04/22/1992	8:16:00	18.9	7.63	158		8.4	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	04/22/1992	8:18:00	18.9	7.61	162		8.3	4
WEHTZ	Wheeler	TRM	295.9	Transition	04/22/1992	8:19:00	18.9	7.58	162		8.3	6
WEHTZ	Wheeler	TRM	295.9	Transition	04/22/1992	8:21:00	18.9	7.56	160		8.2	7.6
WEHTZ	Wheeler	TRM	295.9	Transition	05/20/1992	9:00:00	22.7	7.44	160		7.9	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	05/20/1992	9:01:00	22.7	7.45	160		7.8	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	05/20/1992	9:02:00	22.6	7.39	159		7.6	4
WEHTZ	Wheeler	TRM	295.9	Transition	05/20/1992	9:04:00	22.2	7.28	158		6.9	6
WEHTZ	Wheeler	TRM	295.9	Transition	05/20/1992	9:06:00	21.9	7.2	158		6.6	8
WEHTZ	Wheeler	TRM	295.9	Transition	05/20/1992	9:07:00	21.9	7.18	158		6.6	8.2
WEHTZ	Wheeler	TRM	295.9	Transition	06/17/1992	8:30:00	24.9	7.16	170		6	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	06/17/1992	8:31:00	24.9	7.16	170		6	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	06/17/1992	8:32:00	24.9	7.15	170		6	4
WEHTZ	Wheeler	TRM	295.9	Transition	06/17/1992	8:34:00	24.9	7.12	171		6	6
WEHTZ	Wheeler	TRM	295.9	Transition	06/17/1992	8:35:00	24.9	7.12	169		5.9	7.6
WEHTZ	Wheeler	TRM	295.9	Transition	06/17/1992	8:36:00	24.9	7.13	171		5.9	8
WEHTZ	Wheeler	TRM	295.9	Transition	06/17/1992	8:37:00	24.9	7.12	169		5.9	8.6

WEHTZ	Wheeler	TRM	295.9	Transition	07/22/1992	8:50:00	28.6	7.36	158	6.1	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	07/22/1992	8:51:00	28.6	7.33	159	6.1	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	07/22/1992	8:52:00	28.6	7.28	161	6	4
WEHTZ	Wheeler	TRM	295.9	Transition	07/22/1992	8:54:00	28.6	7.25	158	6	6
WEHTZ	Wheeler	TRM	295.9	Transition	07/22/1992	8:55:00	28.7	7.21	155	6	7
WEHTZ	Wheeler	TRM	295.9	Transition	07/22/1992	8:56:00	28.6	7.22	157	6	8
WEHTZ	Wheeler	TRM	295.9	Transition	08/19/1992	10:32:00	27.6	7.42	167	6.6	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	08/19/1992	10:33:00	27.6	7.38	167	6.5	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/19/1992	10:34:00	27.5	7.34	167	6.4	4
WEHTZ	Wheeler	TRM	295.9	Transition	08/19/1992	10:35:00	27.5	7.33	169	6.4	6
WEHTZ	Wheeler	TRM	295.9	Transition	08/19/1992	10:36:00	27.5	7.29	170	6.4	6.4
WEHTZ	Wheeler	TRM	295.9	Transition	08/19/1992	10:37:00	27.4	7.29	169	6.2	7.4
WEHTZ	Wheeler	TRM	295.9	Transition	09/23/1992	8:44:00	25.3	7.62	187	6.4	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	09/23/1992	8:45:00	25.3	7.62	187	6.4	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	09/23/1992	8:46:00	25.3	7.61	188	6.5	4
WEHTZ	Wheeler	TRM	295.9	Transition	09/23/1992	8:47:00	25.3	7.61	189	6.4	6
WEHTZ	Wheeler	TRM	295.9	Transition	09/23/1992	8:48:00	25.2	7.59	190	6.4	7.5
WEHTZ	Wheeler	TRM	295.9	Transition	09/23/1992	8:49:00	25	7.61	191	6.4	8
WEHTZ	Wheeler	TRM	295.9	Transition	09/23/1992	8:50:00	25	7.6	191	6.4	8.5
WEHTZ	Wheeler	TRM	295.9	Transition	04/14/1993	9:30:00	15.4	7.79	152	9.8	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	04/14/1993	9:31:00	15.3	7.69	152	9.4	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	04/14/1993	9:32:00	15.3	7.67	150	9.3	4
WEHTZ	Wheeler	TRM	295.9	Transition	04/14/1993	9:34:00	15.3	7.65	152	9.3	6
WEHTZ	Wheeler	TRM	295.9	Transition	04/14/1993	9:35:00	15.2	7.65	154	9.2	8
WEHTZ	Wheeler	TRM	295.9	Transition	04/14/1993	9:36:00	15.2	7.67	154	9.2	7
WEHTZ	Wheeler	TRM	295.9	Transition	05/12/1993	10:16:00	21.3	7.61	167	8.1	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	05/12/1993	10:17:00	21.2	7.56	167	7.9	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	05/12/1993	10:18:00	21.2	7.53	166	7.7	4
WEHTZ	Wheeler	TRM	295.9	Transition	05/12/1993	10:20:00	21.2	7.51	165	7.7	6
WEHTZ	Wheeler	TRM	295.9	Transition	05/12/1993	10:21:00	21.2	7.47	166	7.5	6.6
WEHTZ	Wheeler	TRM	295.9	Transition	05/12/1993	10:22:00	21.2	7.49	164	7.6	7.7
WEHTZ	Wheeler	TRM	295.9	Transition	06/16/1993	10:25:00	27.7	7.65	169	8.1	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	06/16/1993	10:26:00	27.6	7.64	169	8.1	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	06/16/1993	10:28:00	27.4	7.5	169	7.3	4
WEHTZ	Wheeler	TRM	295.9	Transition	06/16/1993	10:29:00	27.4	7.45	171	7.3	6
WEHTZ	Wheeler	TRM	295.9	Transition	06/16/1993	10:31:00	27.3	7.4	174	7	8
WEHTZ	Wheeler	TRM	295.9	Transition	06/16/1993	10:32:00	27.2	7.36	173	6.7	9.1

WEHTZ	Wheeler	TRM	295.9	Transition	07/14/1993	11:55:00	29.6	7.57	163	6.9	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	07/14/1993	11:56:00	29.6	7.55	163	6.9	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	07/14/1993	11:57:00	29.5	7.51	161	6.7	4
WEHTZ	Wheeler	TRM	295.9	Transition	07/14/1993	11:59:00	29.4	7.48	159	6.7	6
WEHTZ	Wheeler	TRM	295.9	Transition	07/14/1993	12:00:00	29.3	7.42	156	6.5	8
WEHTZ	Wheeler	TRM	295.9	Transition	07/14/1993	12:01:00	29.3	7.37	156	6.5	8.4
WEHTZ	Wheeler	TRM	295.9	Transition	07/14/1993	12:02:00	29.3	7.39	156	6.3	9.4
WEHTZ	Wheeler	TRM	295.9	Transition	08/11/1993	10:44:00	29.6	7.63	177	6.5	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	08/11/1993	10:45:00	28.9	7.56	177	6.2	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/11/1993	10:46:00	28.8	7.46	178	5.9	4
WEHTZ	Wheeler	TRM	295.9	Transition	08/11/1993	10:47:00	28.7	7.45	173	6.3	6
WEHTZ	Wheeler	TRM	295.9	Transition	08/11/1993	10:48:00	28.5	7.53	171	6.7	8
WEHTZ	Wheeler	TRM	295.9	Transition	08/11/1993	10:50:00	28.5	7.54	173	6.7	8.3
WEHTZ	Wheeler	TRM	295.9	Transition	08/11/1993	10:51:00	28.5	7.54	173	6.6	9.3
WEHTZ	Wheeler	TRM	295.9	Transition	09/16/1993	8:21:00	25.8	7.39	192	6.8	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	09/16/1993	8:22:00	25.8	7.37	193	6.3	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	09/16/1993	8:23:00	25.9	7.35	192	6.6	4
WEHTZ	Wheeler	TRM	295.9	Transition	09/16/1993	8:24:00	25.8	7.31	194	6.7	6
WEHTZ	Wheeler	TRM	295.9	Transition	09/16/1993	8:30:00	25.6	7.24	197	6.1	7.5
WEHTZ	Wheeler	TRM	295.9	Transition	09/16/1993	8:35:00	25.5	7.27	197	6.1	8
WEHTZ	Wheeler	TRM	295.9	Transition	09/16/1993	8:37:00	25.5	7.24	196	6.1	8.5
WEHTZ	Wheeler	TRM	295.9	Transition	04/13/1994	9:20:00	15.2	7.6	131	10.4	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	04/13/1994	9:22:00	15.2	7.6	131	10.4	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	04/13/1994	9:24:00	15.2	7.6	131	10.4	4
WEHTZ	Wheeler	TRM	295.9	Transition	04/13/1994	9:26:00	15.2	7.6	131	10.4	6
WEHTZ	Wheeler	TRM	295.9	Transition	04/13/1994	9:28:00	15.2	7.6	131	10.4	6.7
WEHTZ	Wheeler	TRM	295.9	Transition	04/13/1994	9:30:00	15.2	7.6	131	10.4	7.7
WEHTZ	Wheeler	TRM	295.9	Transition	05/11/1994	8:14:00	20.4	7.6	142	7.8	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	05/11/1994	8:16:00	20.4	7.5	142	7.8	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	05/11/1994	8:18:00	20.4	7.5	142	7.7	4
WEHTZ	Wheeler	TRM	295.9	Transition	05/11/1994	8:22:00	20.4	7.5	142	7.7	6
WEHTZ	Wheeler	TRM	295.9	Transition	05/11/1994	8:24:00	20.4	7.5	142	7.6	7.3
WEHTZ	Wheeler	TRM	295.9	Transition	05/11/1994	8:26:00	20.4	7.5	142	7.7	8
WEHTZ	Wheeler	TRM	295.9	Transition	05/11/1994	8:28:00	20.4	7.5	141	7.6	8.3
WEHTZ	Wheeler	TRM	295.9	Transition	06/15/1994	7:58:00	26.9	7.35	164	6.2	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	06/15/1994	8:00:00	26.9	7.36	164	6.2	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	06/15/1994	8:02:00	26.9	7.34	164	6.1	4

WEHTZ	Wheeler	TRM	295.9	Transition	06/15/1994	8:04:00	26.9	7.34	164	6.1	6
WEHTZ	Wheeler	TRM	295.9	Transition	06/15/1994	8:06:00	26.9	7.33	164	6	7.2
WEHTZ	Wheeler	TRM	295.9	Transition	06/15/1994	8:08:00	26.9	7.34	164	6	8
WEHTZ	Wheeler	TRM	295.9	Transition	06/15/1994	8:10:00	26.9	7.32	164	6	8.2
WEHTZ	Wheeler	TRM	295.9	Transition	07/13/1994	8:25:00	27.2	7.6	166	6.3	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	07/13/1994	8:27:00	27.2	7.6	166	6.2	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	07/13/1994	8:29:00	27.2	7.6	166	6.2	4
WEHTZ	Wheeler	TRM	295.9	Transition	07/13/1994	8:33:00	27.2	7.5	166	6.2	6
WEHTZ	Wheeler	TRM	295.9	Transition	07/13/1994	8:35:00	27.2	7.5	166	6.2	7.7
WEHTZ	Wheeler	TRM	295.9	Transition	07/13/1994	8:37:00	27.2	7.5	166	6.2	8
WEHTZ	Wheeler	TRM	295.9	Transition	07/13/1994	8:39:00	27.2	7.5	167	6.2	8.7
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/1994	8:34:00	27.6	7.6	153	7	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/1994	8:38:00	27.6	7.57	153	7	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/1994	8:42:00	27.6	7.55	154	6.6	4
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/1994	8:46:00	27.6	7.54	153	6.7	6
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/1994	8:50:00	27.6	7.53	150	6.6	8
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/1994	8:54:00	27.6	7.52	151	6.6	8.3
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/1994	8:58:00	27.6	7.52	154	6.6	9.3
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/1994	8:53:00	26.6	7.4	165	6.4	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/1994	8:55:00	26.6	7.3	165	6.3	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/1994	8:57:00	26.6	7.3	165	6.3	4
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/1994	9:01:00	26.6	7.3	165	6.3	6
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/1994	9:03:00	26.6	7.3	164	6.3	7.4
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/1994	9:05:00	26.6	7.3	164	6.3	8
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/1994	9:07:00	26.6	7.3	164	6.3	8.4
WEHTZ	Wheeler	TRM	295.9	Transition	04/04/1995	8:58:00	16.5	7.85	137	9.5	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	04/04/1995	9:02:00	16.5	7.8	138	9.5	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	04/04/1995	9:06:00	16.5	7.79	141	9.4	4
WEHTZ	Wheeler	TRM	295.9	Transition	04/04/1995	9:10:00	16.5	7.76	140	9.3	6
WEHTZ	Wheeler	TRM	295.9	Transition	04/04/1995	9:14:00	16.5	7.73	140	9.2	7.1
WEHTZ	Wheeler	TRM	295.9	Transition	05/08/1995	13:01:00	20.6	8.16	160	10.2	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	05/08/1995	13:05:00	20.6	8.18	160	10.1	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	05/08/1995	13:09:00	20.4	8.09	158	9.9	4.1
WEHTZ	Wheeler	TRM	295.9	Transition	05/08/1995	13:13:00	19.9	7.93	149	9.5	5.9
WEHTZ	Wheeler	TRM	295.9	Transition	05/08/1995	13:17:00	19.4	7.6	151	8.3	7
WEHTZ	Wheeler	TRM	295.9	Transition	05/08/1995	13:21:00	19.2	7.62	153	8	8
WEHTZ	Wheeler	TRM	295.9	Transition	06/19/1995	13:12:00	26.8	8.27	170	9.3	0.3

WEHTZ	Wheeler	TRM	295.9	Transition	06/19/1995	13:16:00	26.8	8.23	170	9.3	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	06/19/1995	13:20:00	26.6	7.89	171	8.4	4
WEHTZ	Wheeler	TRM	295.9	Transition	06/19/1995	13:24:00	26.3	7.59	173	7.5	5
WEHTZ	Wheeler	TRM	295.9	Transition	06/19/1995	13:28:00	26.1	7.42	173	6.8	6
WEHTZ	Wheeler	TRM	295.9	Transition	06/19/1995	13:32:00	26.1	7.4	173	6.8	8
WEHTZ	Wheeler	TRM	295.9	Transition	07/24/1995	13:37:00	30.3	7.8	187	8	0.4
WEHTZ	Wheeler	TRM	295.9	Transition	07/24/1995	13:41:00	30.3	7.77	188	8	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	07/24/1995	13:45:00	30	7.45	187	7	3
WEHTZ	Wheeler	TRM	295.9	Transition	07/24/1995	13:49:00	29.8	7.36	185	6.2	4
WEHTZ	Wheeler	TRM	295.9	Transition	07/24/1995	13:53:00	29.8	7.24	183	5.9	6
WEHTZ	Wheeler	TRM	295.9	Transition	07/24/1995	13:57:00	29.6	7.18	185	5.6	8
WEHTZ	Wheeler	TRM	295.9	Transition	08/29/1995	12:17:00	30.9	7.37	188	6.3	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	08/29/1995	12:21:00	30	7.41	189	6.4	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/29/1995	12:25:00	29.5	7.28	190	5.7	4
WEHTZ	Wheeler	TRM	295.9	Transition	08/29/1995	12:29:00	29.4	7.26	187	5.7	6
WEHTZ	Wheeler	TRM	295.9	Transition	08/29/1995	12:33:00	29.3	7.35	185	6.3	8
WEHTZ	Wheeler	TRM	295.9	Transition	04/08/1997	10:22:00	15.9	7.91	178	9	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	04/08/1997	10:25:00	15.9	7.92	178	9	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	04/08/1997	10:28:00	15.9	7.94	178	8.8	2
WEHTZ	Wheeler	TRM	295.9	Transition	04/08/1997	10:31:00	15.9	7.94	178	8.8	3
WEHTZ	Wheeler	TRM	295.9	Transition	04/08/1997	10:34:00	15.9	7.95	177	8.7	4
WEHTZ	Wheeler	TRM	295.9	Transition	04/08/1997	10:37:00	15.9	7.95	177	8.7	5
WEHTZ	Wheeler	TRM	295.9	Transition	04/08/1997	10:40:00	15.9	7.98	176	8.6	6.5
WEHTZ	Wheeler	TRM	295.9	Transition	05/05/1997	12:53:00	18.3	7.46	143	9	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	05/05/1997	12:56:00	18.2	7.45	143	9	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	05/05/1997	12:59:00	18.2	7.46	143	9	4
WEHTZ	Wheeler	TRM	295.9	Transition	05/05/1997	13:02:00	18.2	7.44	143	8.9	6
WEHTZ	Wheeler	TRM	295.9	Transition	05/05/1997	13:05:00	18.2	7.45	144	8.9	7.5
WEHTZ	Wheeler	TRM	295.9	Transition	06/09/1997	11:45:00	20.7	7.54	135	7.3	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	06/09/1997	11:48:00	20.7	7.53	134	7.2	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	06/09/1997	11:51:00	20.7	7.53	134	7.2	4
WEHTZ	Wheeler	TRM	295.9	Transition	06/09/1997	11:54:00	20.7	7.54	135	7.2	6
WEHTZ	Wheeler	TRM	295.9	Transition	06/09/1997	11:57:00	20.7	7.55	134	7.1	8.1
WEHTZ	Wheeler	TRM	295.9	Transition	07/07/1997	11:11:00	27.5	7.4	141	6.4	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	07/07/1997	11:14:00	27.5	7.4	141	6.4	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	07/07/1997	11:17:00	27.5	7.4	142	6.4	4
WEHTZ	Wheeler	TRM	295.9	Transition	07/07/1997	11:20:00	27.5	7.41	142	6.4	6

WEHTZ	Wheeler	TRM	295.9	Transition	07/07/1997	11:23:00	27.5	7.43	142	6.4	7
WEHTZ	Wheeler	TRM	295.9	Transition	07/07/1997	11:26:00	27.4	7.44	142	6.4	8.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/12/1997	10:34:00	27.4	7.5	163	6.4	0.4
WEHTZ	Wheeler	TRM	295.9	Transition	08/12/1997	10:38:00	27.3	7.51	163	6.4	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/12/1997	10:42:00	27.2	7.49	162	6.3	4
WEHTZ	Wheeler	TRM	295.9	Transition	08/12/1997	10:46:00	27.2	7.48	162	6.3	6
WEHTZ	Wheeler	TRM	295.9	Transition	08/12/1997	10:50:00	27.2	7.51	162	6.3	7
WEHTZ	Wheeler	TRM	295.9	Transition	09/08/1997	11:19:00	27.7	7.67	181	7.4	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	09/08/1997	11:22:00	27.6	7.67	182	7.3	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	09/08/1997	11:25:00	27.5	7.68	182	7.1	4
WEHTZ	Wheeler	TRM	295.9	Transition	09/08/1997	11:28:00	27.5	7.72	181	7.2	6
WEHTZ	Wheeler	TRM	295.9	Transition	09/08/1997	11:31:00	27.4	7.75	180	7.4	7.2
WEHTZ	Wheeler	TRM	295.9	Transition	04/05/1999	12:32:16	17.3	7.9	175	9.6	3
WEHTZ	Wheeler	TRM	295.9	Transition	04/05/1999	12:33:43	16.3	7.8	181	9.1	4
WEHTZ	Wheeler	TRM	295.9	Transition	04/05/1999	12:35:01	15.6	7.6	170	8.9	6
WEHTZ	Wheeler	TRM	295.9	Transition	04/05/1999	12:36:43	15.4	7.5	175	8.7	8
WEHTZ	Wheeler	TRM	295.9	Transition	04/05/1999	12:37:43	15.4	7.5	176	8.6	8.4
WEHTZ	Wheeler	TRM	295.9	Transition	04/05/1999	13:30:12	18.5	7.9	168	9.8	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	04/05/1999	13:31:24	17.7	8	170	9.7	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	04/05/1999	13:39:10	15.4	7.4	175	8.7	7.4
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/1999	10:16:07	21.25	7.28	174	7.01	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/1999	10:17:29	21	7.28	174.8	7.18	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/1999	10:18:30	21.01	7.27	174.8	7.17	3
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/1999	10:19:45	20.98	7.27	174.3	7.13	4
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/1999	10:20:42	20.98	7.27	174.6	7.06	6
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/1999	10:21:48	20.96	7.28	174.7	7	8
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/1999	10:22:51	20.96	7.28	174.4	7.07	8.2
WEHTZ	Wheeler	TRM	295.9	Transition	06/07/1999	13:08:32	29.49	8.32	152.8	9.98	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	06/07/1999	13:09:42	27.44	8.86	157.6	11.68	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	06/07/1999	13:10:24	26.25	7.85	163.5	8.54	3
WEHTZ	Wheeler	TRM	295.9	Transition	06/07/1999	13:11:26	26.19	7.73	164.1	8.18	4
WEHTZ	Wheeler	TRM	295.9	Transition	06/07/1999	13:12:24	26.03	7.47	163.8	7.15	6
WEHTZ	Wheeler	TRM	295.9	Transition	06/07/1999	13:13:22	25.83	7.34	162.2	6.33	8
WEHTZ	Wheeler	TRM	295.9	Transition	06/07/1999	13:14:14	25.8	7.29	162.4	6.1	9.1
WEHTZ	Wheeler	TRM	295.9	Transition	06/22/1999	9:25:28	26.89	8.83	155.7	20	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	06/22/1999	9:26:51	26.46	8.48	158.8	10.78	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	06/22/1999	9:27:22	26.21	8.23	163.2	9.81	3

WEHTZ	Wheeler	TRM	295.9	Transition	06/22/1999	9:28:03	26.19	7.9	166.5	8.68	4
WEHTZ	Wheeler	TRM	295.9	Transition	06/22/1999	9:28:38	26.17	7.76	169.7	8.15	5
WEHTZ	Wheeler	TRM	295.9	Transition	06/22/1999	9:29:14	26.15	7.66	171.9	7.65	6
WEHTZ	Wheeler	TRM	295.9	Transition	06/22/1999	9:29:43	26.02	7.75	167	7.03	7
WEHTZ	Wheeler	TRM	295.9	Transition	06/22/1999	9:30:24	25.55	7.41	162	6.17	8
WEHTZ	Wheeler	TRM	295.9	Transition	06/22/1999	9:31:07	25.45	7.37	160.1	5.75	8.9
WEHTZ	Wheeler	TRM	295.9	Transition	07/12/1999	15:32:57	28.98	7.35	169.9	5.42	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	07/12/1999	15:33:44	28.76	7.33	173.9	5.33	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	07/12/1999	15:33:52	28.82	7.31	172.6	5.28	3
WEHTZ	Wheeler	TRM	295.9	Transition	07/12/1999	15:34:47	28.77	7.3	173.5	5.27	4
WEHTZ	Wheeler	TRM	295.9	Transition	07/12/1999	15:35:34	28.75	7.3	173.7	5.2	6
WEHTZ	Wheeler	TRM	295.9	Transition	07/12/1999	15:36:19	28.74	7.3	173.6	5.18	8
WEHTZ	Wheeler	TRM	295.9	Transition	07/12/1999	15:37:09	28.73	7.3	173.3	5.09	8.8
WEHTZ	Wheeler	TRM	295.9	Transition	07/26/1999	2:50:03	31.65	8.49	160.3	9.86	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	07/26/1999	2:50:40	30.43	7.72	166.8	7.54	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	07/26/1999	2:51:25	30.2	7.54	167.8	6.94	3
WEHTZ	Wheeler	TRM	295.9	Transition	07/26/1999	2:51:55	30.13	7.5	167.4	6.6	4
WEHTZ	Wheeler	TRM	295.9	Transition	07/26/1999	2:52:25	30.11	7.47	167.2	6.58	5
WEHTZ	Wheeler	TRM	295.9	Transition	07/26/1999	2:52:49	30.06	7.45	166.9	6.48	6
WEHTZ	Wheeler	TRM	295.9	Transition	07/26/1999	2:53:19	30.05	7.41	166.2	6.44	7
WEHTZ	Wheeler	TRM	295.9	Transition	07/26/1999	2:54:33	30.04	7.42	165.9	6.41	8
WEHTZ	Wheeler	TRM	295.9	Transition	07/26/1999	2:55:30	30.03	7.43	166.5	6.33	8.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/09/1999	10:27:43	30.52	7.53	155.4	6.4	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	08/09/1999	10:28:09	30.22	7.48	158.3	6.22	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/09/1999	10:28:56	30.07	7.43	154.1	5.97	4
WEHTZ	Wheeler	TRM	295.9	Transition	08/09/1999	10:29:35	30.03	7.42	154.8	6.04	6
WEHTZ	Wheeler	TRM	295.9	Transition	08/09/1999	10:30:11	29.98	7.43	154.8	6	8
WEHTZ	Wheeler	TRM	295.9	Transition	08/09/1999	10:31:04	29.98	7.42	154	5.96	9
WEHTZ	Wheeler	TRM	295.9	Transition	08/09/1999	10:31:32	29.98	7.44	153.7	5.78	9.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/23/1999	11:37:01	29.8	7.6	158	6.6	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	08/23/1999	11:37:45	29.8	7.5	157	6.3	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/23/1999	11:38:24	29.4	7.4	154	5.9	4
WEHTZ	Wheeler	TRM	295.9	Transition	08/23/1999	11:39:15	29.3	7.4	153	6.2	6
WEHTZ	Wheeler	TRM	295.9	Transition	08/23/1999	11:39:56	29.1	7.5	151	6.5	8
WEHTZ	Wheeler	TRM	295.9	Transition	08/23/1999	11:40:26	29	7.5	151	6.2	9.4
WEHTZ	Wheeler	TRM	295.9	Transition	09/08/1999	11:07:20	29.33	7.53	169.9	5.98	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	09/08/1999	11:08:04	29	7.47	171.5	5.87	1.5

WEHTZ	Wheeler	TRM	295.9 Transition	09/08/1999	11:09:06	28.85	7.42	169.9		5.67	4
WEHTZ	Wheeler	TRM	295.9 Transition	09/08/1999	11:09:50	28.79	7.42	167.6		5.73	6
WEHTZ	Wheeler	TRM	295.9 Transition	09/08/1999	11:10:49	28.73	7.38	167		5.42	8
WEHTZ	Wheeler	TRM	295.9 Transition	09/08/1999	11:11:33	28.73	7.38	167.2		5.02	9
WEHTZ	Wheeler	TRM	295.9 Transition	04/10/2000	10:50:49	15.7	7.3	130.8		9.1	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	04/10/2000	10:51:31	15.5	7.3	131.6		8.9	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	04/10/2000	10:52:18	15.5	7.3	131.6		8.9	3
WEHTZ	Wheeler	TRM	295.9 Transition	04/10/2000	10:53:13	15.5	7.3	131.6		8.8	4
WEHTZ	Wheeler	TRM	295.9 Transition	04/10/2000	10:54:02	15.5	7.3	131.4		8.8	6
WEHTZ	Wheeler	TRM	295.9 Transition	04/10/2000	10:55:55	15.5	7.3	131.6		8.6	8
WEHTZ	Wheeler	TRM	295.9 Transition	05/01/2000	13:33:04	18.1	7.5	139.6	94.6	8.8	9.5
WEHTZ	Wheeler	TRM	295.9 Transition	05/01/2000	13:33:54	18.2	7.5	139.5	95.8	8.9	8.4
WEHTZ	Wheeler	TRM	295.9 Transition	05/01/2000	13:34:34	18.2	7.5	139.2	94.9	8.9	8
WEHTZ	Wheeler	TRM	295.9 Transition	05/01/2000	13:35:21	18.2	7.5	139.8	96.6	9	6
WEHTZ	Wheeler	TRM	295.9 Transition	05/01/2000	13:36:10	18.8	7.9	145.9	109	10.1	4
WEHTZ	Wheeler	TRM	295.9 Transition	05/01/2000	13:36:49	18.8	7.9	146.4	110.9	10.2	3
WEHTZ	Wheeler	TRM	295.9 Transition	05/01/2000	13:37:25	18.9	8	145.6	110.7	10.2	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	05/01/2000	13:38:03	18.9	8	146.8	112.1	10.3	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	06/12/2000	10:51:51	26.1	7	165	68.2	5.5	8
WEHTZ	Wheeler	TRM	295.9 Transition	06/12/2000	10:52:00	26	7	161		5.3	9.2
WEHTZ	Wheeler	TRM	295.9 Transition	06/12/2000	10:52:45	26.4	7.1	162	77.5	6.2	6
WEHTZ	Wheeler	TRM	295.9 Transition	06/12/2000	10:53:52	26.7	7.3	160	87.2	6.9	5
WEHTZ	Wheeler	TRM	295.9 Transition	06/12/2000	10:54:46	27	7.4	157	94.1	7.4	4
WEHTZ	Wheeler	TRM	295.9 Transition	06/12/2000	10:55:46	27.2	7.6	156	102.4	8.1	3
WEHTZ	Wheeler	TRM	295.9 Transition	06/12/2000	10:56:25	27.9	8.3	152	121.4	9.4	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	06/12/2000	10:57:09	28.5	8.7	150	139.1	10.7	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	07/13/2000	10:32:28	30	7	167	73.9	5.5	9.3
WEHTZ	Wheeler	TRM	295.9 Transition	07/13/2000	10:33:29	30	7	167	73.9	5.5	9
WEHTZ	Wheeler	TRM	295.9 Transition	07/13/2000	10:34:13	30.1	7.1	169	76.3	5.7	7
WEHTZ	Wheeler	TRM	295.9 Transition	07/13/2000	10:34:56	30.2	7.1	163	76.3	5.7	5
WEHTZ	Wheeler	TRM	295.9 Transition	07/13/2000	10:35:38	30.2	7.1	162	75.7	5.6	3
WEHTZ	Wheeler	TRM	295.9 Transition	07/13/2000	10:36:19	30.2	7.1	163	78	5.8	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	07/13/2000	10:37:27	30.7	7.2	156	87.1	6.4	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	08/10/2000	10:13:03	29.8	7.1	176	76.8	5.8	8.2
WEHTZ	Wheeler	TRM	295.9 Transition	08/10/2000	10:13:42	29.8	7.1	177	76.1	5.7	8
WEHTZ	Wheeler	TRM	295.9 Transition	08/10/2000	10:14:17	29.8	7.1	177	77.8	5.8	6
WEHTZ	Wheeler	TRM	295.9 Transition	08/10/2000	10:15:00	29.8	7.1	179	77.6	5.8	4

WEHTZ	Wheeler	TRM	295.9	Transition	08/10/2000	10:15:42	29.9	7.1	178	79.2	5.9	3
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/2000	10:16:11	30	7.2	183	81.8	6.1	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/2000	10:16:44	30.1	7.2	181	82.5	6.2	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/2000	11:02:07	26.4	7.2	180	67.5	5.4	8.6
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/2000	11:02:44	26.4	7.1	179	68.3	5.4	8
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/2000	11:03:18	26.4	7.2	178	70.3	5.6	6
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/2000	11:03:48	26.5	7.2	180	70.2	5.6	4
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/2000	11:04:21	26.5	7.2	181	70.4	5.6	3
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/2000	11:04:51	26.5	7.2	182	70.3	5.6	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	09/14/2000	11:05:29	27	7.2	182	76.5	6	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	04/13/2001	10:18:00	17.71	7.48	160	91.1	8.57	9.4
WEHTZ	Wheeler	TRM	295.9	Transition	04/13/2001	10:18:59	17.66	7.43	161	90	8.48	9
WEHTZ	Wheeler	TRM	295.9	Transition	04/13/2001	10:19:36	17.7	7.43	161	90.4	8.51	7
WEHTZ	Wheeler	TRM	295.9	Transition	04/13/2001	10:20:10	17.74	7.43	157	90.4	8.5	5
WEHTZ	Wheeler	TRM	295.9	Transition	04/13/2001	10:20:48	17.77	7.45	158	90.6	8.51	3
WEHTZ	Wheeler	TRM	295.9	Transition	04/13/2001	10:21:26	18.06	7.48	156	90.8	8.48	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	04/13/2001	10:22:18	18.68	7.57	149	95.5	8.81	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/2001	11:03:57	21.67	7.26	176	79.5	6.94	9.5
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/2001	11:04:39	21.68	7.21	183	79.4	6.93	9
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/2001	11:05:24	21.76	7.27	175	87.3	7.61	7
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/2001	11:06:05	21.82	7.29	176	88.8	7.73	5
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/2001	11:06:51	22.08	7.31	176	91.4	7.92	3
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/2001	11:07:39	22.08	7.32	176	91.1	7.89	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	05/10/2001	11:08:27	22.3	7.34	175	91.2	7.87	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	06/14/2001	9:59:03	24.84	6.93	162	59.1	4.83	8.8
WEHTZ	Wheeler	TRM	295.9	Transition	06/14/2001	10:00:19	24.86	6.87	164	58.3	4.75	8
WEHTZ	Wheeler	TRM	295.9	Transition	06/14/2001	10:01:00	24.98	6.9	162	61.1	4.98	6
WEHTZ	Wheeler	TRM	295.9	Transition	06/14/2001	10:02:10	25.43	6.96	159	70.1	5.66	5
WEHTZ	Wheeler	TRM	295.9	Transition	06/14/2001	10:03:09	25.81	6.99	161	77.7	6.23	4
WEHTZ	Wheeler	TRM	295.9	Transition	06/14/2001	10:03:49	26.07	7.03	166	82.7	6.6	3
WEHTZ	Wheeler	TRM	295.9	Transition	06/14/2001	10:04:35	26.56	7.18	157	95.4	7.54	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	06/14/2001	10:05:27	27.01	7.23	157	98.6	7.74	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	07/12/2001	10:37:52	27.89	7.1	171	70	5.4	9.2
WEHTZ	Wheeler	TRM	295.9	Transition	07/12/2001	10:38:35	27.88	7.07	172	70.2	5.42	9
WEHTZ	Wheeler	TRM	295.9	Transition	07/12/2001	10:39:19	27.93	7.09	171	74.2	5.72	7
WEHTZ	Wheeler	TRM	295.9	Transition	07/12/2001	10:40:04	28.06	7.15	168	81.9	6.3	5
WEHTZ	Wheeler	TRM	295.9	Transition	07/12/2001	10:40:46	28.26	7.2	173	85	6.51	3

WEHTZ	Wheeler	TRM	295.9	Transition	07/12/2001	10:42:01	28.9	7.47	165	102.6	7.77	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	07/12/2001	10:42:56	29.89	7.74	160	116.9	8.71	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	08/16/2001	10:35:26	27.05	7.08	174	66.1	5.19	8.4
WEHTZ	Wheeler	TRM	295.9	Transition	08/16/2001	10:36:26	26.99	7.06	173	65.8	5.17	8
WEHTZ	Wheeler	TRM	295.9	Transition	08/16/2001	10:37:39	26.99	7.05	173	65.7	5.16	6
WEHTZ	Wheeler	TRM	295.9	Transition	08/16/2001	10:38:12	27.09	7.05	173	66.7	5.23	4
WEHTZ	Wheeler	TRM	295.9	Transition	08/16/2001	10:38:53	27.12	7.06	174	67.3	5.28	3
WEHTZ	Wheeler	TRM	295.9	Transition	08/16/2001	10:40:14	27.24	7.09	175	68.4	5.35	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/16/2001	10:41:06	27.52	7.13	181	72.9	5.68	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	09/13/2001	10:14:04	26.62	7.22	191	80.2	6.37	9
WEHTZ	Wheeler	TRM	295.9	Transition	09/13/2001	10:15:03	26.63	7.19	194	80.6	6.4	8
WEHTZ	Wheeler	TRM	295.9	Transition	09/13/2001	10:15:56	26.86	7.21	193	82.8	6.55	6
WEHTZ	Wheeler	TRM	295.9	Transition	09/13/2001	10:16:49	26.94	7.22	192	82.2	6.49	4
WEHTZ	Wheeler	TRM	295.9	Transition	09/13/2001	10:17:44	27.02	7.2	194	81.7	6.44	3
WEHTZ	Wheeler	TRM	295.9	Transition	09/13/2001	10:18:25	27.07	7.23	197	83.5	6.58	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	09/13/2001	10:19:23	27.15	7.22	190	84.1	6.62	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	10/15/2001	10:30:12	20.12	7.8	205	90.4	8.13	9.3
WEHTZ	Wheeler	TRM	295.9	Transition	10/15/2001	10:31:03	20.12	7.79	204	89.6	8.06	9
WEHTZ	Wheeler	TRM	295.9	Transition	10/15/2001	10:31:41	20.12	7.8	204	89.5	8.05	7
WEHTZ	Wheeler	TRM	295.9	Transition	10/15/2001	10:32:25	20.13	7.81	204	89.5	8.05	5
WEHTZ	Wheeler	TRM	295.9	Transition	10/15/2001	10:33:01	20.15	7.83	201	89.6	8.05	4
WEHTZ	Wheeler	TRM	295.9	Transition	10/15/2001	10:33:42	20.22	7.84	202	90.5	8.12	3
WEHTZ	Wheeler	TRM	295.9	Transition	10/15/2001	10:34:32	20.37	7.89	199	92.1	8.24	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	10/15/2001	10:35:08	20.41	7.89	196	92.8	8.3	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	04/15/2002	11:28:01	17.53	7.32	153	89.4	8.44	9.5
WEHTZ	Wheeler	TRM	295.9	Transition	04/15/2002	11:28:40	17.56	7.24	150	88.5	8.35	9
WEHTZ	Wheeler	TRM	295.9	Transition	04/15/2002	11:29:23	17.67	7.35	151	93.9	8.84	7
WEHTZ	Wheeler	TRM	295.9	Transition	04/15/2002	11:30:14	17.82	7.42	153	97	9.1	5
WEHTZ	Wheeler	TRM	295.9	Transition	04/15/2002	11:31:16	18.35	7.95	153	109.5	10.17	3
WEHTZ	Wheeler	TRM	295.9	Transition	04/15/2002	11:32:06	18.89	8.76	150	132.2	12.14	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	04/15/2002	11:33:09	20.69	8.88	150	150.9	13.37	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	05/14/2002	7:40:01	18.8	7.54	162	91.3	8.42	9.1
WEHTZ	Wheeler	TRM	295.9	Transition	05/14/2002	7:41:07	18.76	7.51	160	90.4	8.35	8
WEHTZ	Wheeler	TRM	295.9	Transition	05/14/2002	7:41:56	18.27	7.49	163	91.7	8.55	6
WEHTZ	Wheeler	TRM	295.9	Transition	05/14/2002	7:42:38	18.55	7.47	163	90.7	8.41	4
WEHTZ	Wheeler	TRM	295.9	Transition	05/14/2002	7:43:40	18.52	7.45	163	90.8	8.43	3
WEHTZ	Wheeler	TRM	295.9	Transition	05/14/2002	7:44:44	18.75	7.47	161	89.6	8.27	1.5

WEHTZ	Wheeler	TRM	295.9 Transition	05/14/2002	7:45:20	18.51	7.46	162	90.5	8.4	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	06/10/2002	8:21:09	25.69	7.74	157	97	7.82	8.1
WEHTZ	Wheeler	TRM	295.9 Transition	06/10/2002	8:22:07	25.72	7.74	151	97.5	7.86	7
WEHTZ	Wheeler	TRM	295.9 Transition	06/10/2002	8:22:49	25.97	7.62	148.1	91.5	7.34	5
WEHTZ	Wheeler	TRM	295.9 Transition	06/10/2002	8:23:42	26.06	7.65	147.9	91.4	7.31	3
WEHTZ	Wheeler	TRM	295.9 Transition	06/10/2002	8:24:29	26.17	7.72	147.4	95.2	7.6	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	06/10/2002	8:25:29	26.2	7.76	147	95.7	7.64	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	07/15/2002	7:44:53	28.53	7.2	168	66.3	5.07	8.5
WEHTZ	Wheeler	TRM	295.9 Transition	07/15/2002	7:45:32	28.52	7.19	168	67.2	5.14	8
WEHTZ	Wheeler	TRM	295.9 Transition	07/15/2002	7:47:19	28.71	7.49	163	88.2	6.73	7
WEHTZ	Wheeler	TRM	295.9 Transition	07/15/2002	7:47:50	28.72	7.54	164	90	6.87	6
WEHTZ	Wheeler	TRM	295.9 Transition	07/15/2002	7:48:32	28.75	7.6	163	93	7.09	5
WEHTZ	Wheeler	TRM	295.9 Transition	07/15/2002	7:49:15	28.84	7.74	162	96.8	7.37	4
WEHTZ	Wheeler	TRM	295.9 Transition	07/15/2002	7:49:45	28.94	7.84	161	99.7	7.58	3
WEHTZ	Wheeler	TRM	295.9 Transition	07/15/2002	7:50:29	29.19	8.12	154	107.9	8.16	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	07/15/2002	7:51:09	29.28	8.31	159	113.8	8.6	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	08/12/2002	7:50:00	29.4	7.5	170		6	8.5
WEHTZ	Wheeler	TRM	295.9 Transition	08/12/2002	7:51:01	29.42	7.41	169	78.9	5.96	8
WEHTZ	Wheeler	TRM	295.9 Transition	08/12/2002	7:51:29	29.46	7.44	174	82.5	6.23	6
WEHTZ	Wheeler	TRM	295.9 Transition	08/12/2002	7:52:02	29.52	7.46	167	81.7	6.16	4
WEHTZ	Wheeler	TRM	295.9 Transition	08/12/2002	7:52:41	29.53	7.46	167	82.3	6.21	3
WEHTZ	Wheeler	TRM	295.9 Transition	08/12/2002	7:53:26	29.55	7.48	163	84	6.33	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	08/12/2002	7:54:05	29.57	7.5	165	84.2	6.34	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	09/09/2002	8:17:44	26.01	7.52	203	90.7	7.28	8.8
WEHTZ	Wheeler	TRM	295.9 Transition	09/09/2002	8:18:36	26.09	7.52	199	91	7.29	8
WEHTZ	Wheeler	TRM	295.9 Transition	09/09/2002	8:19:36	26.03	7.49	197	89.3	7.16	6
WEHTZ	Wheeler	TRM	295.9 Transition	09/09/2002	8:20:36	26.07	7.48	194	89.1	7.14	4
WEHTZ	Wheeler	TRM	295.9 Transition	09/09/2002	8:21:17	26.1	7.49	195	89	7.12	3
WEHTZ	Wheeler	TRM	295.9 Transition	09/09/2002	8:22:02	26.24	7.5	191	90.2	7.2	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	09/09/2002	8:22:39	26.29	7.52	192	89.9	7.17	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	10/07/2002	8:37:16	24.69	7.5	183	82.8	6.8	7.9
WEHTZ	Wheeler	TRM	295.9 Transition	10/07/2002	8:38:09	24.69	7.47	183	82	6.73	7
WEHTZ	Wheeler	TRM	295.9 Transition	10/07/2002	8:38:51	24.72	7.51	186	82.7	6.79	5
WEHTZ	Wheeler	TRM	295.9 Transition	10/07/2002	8:39:35	24.81	7.56	184	87.3	7.16	3
WEHTZ	Wheeler	TRM	295.9 Transition	10/07/2002	8:40:13	24.81	7.61	185	88	7.21	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	10/07/2002	8:40:53	24.81	7.62	184	87.8	7.19	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	04/07/2003	9:30:00	17.25	7.91	187	99.8	9.44	0.3

WEHTZ	Wheeler	TRM	295.9	Transition	04/07/2003	9:30:00	17.22	7.88	185	99.2	9.38	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	04/07/2003	9:30:00	17.17	7.85	187	99.1	9.38	3
WEHTZ	Wheeler	TRM	295.9	Transition	04/07/2003	9:30:00	17.14	7.85	185	98.9	9.37	5
WEHTZ	Wheeler	TRM	295.9	Transition	04/07/2003	9:30:00	17.12	7.81	185	97.9	9.26	7
WEHTZ	Wheeler	TRM	295.9	Transition	04/07/2003	9:30:00	17.1	7.84	184	98.1	9.3	7.5
WEHTZ	Wheeler	TRM	295.9	Transition	05/28/2003	9:15:00	21.44	7.3	121.7	97.1	8.49	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	05/28/2003	9:15:00	21.16	7.29	122.2	95.8	8.42	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	05/28/2003	9:15:00	21.09	7.29	122.4	94.7	8.33	3
WEHTZ	Wheeler	TRM	295.9	Transition	05/28/2003	9:15:00	21.03	7.29	122.5	94.4	8.32	4
WEHTZ	Wheeler	TRM	295.9	Transition	05/28/2003	9:15:00	20.99	7.3	122.9	93.7	8.27	6
WEHTZ	Wheeler	TRM	295.9	Transition	05/28/2003	9:15:00	20.97	7.31	122.8	94.3	8.32	8
WEHTZ	Wheeler	TRM	295.9	Transition	05/28/2003	9:15:00	20.98	7.33	122.9	97.4	8.6	8.5
WEHTZ	Wheeler	TRM	295.9	Transition	06/23/2003	9:37:00	26.4	7.2	146		7.5	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	06/23/2003	9:37:00	26.3	7.1	146		7.5	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	06/23/2003	9:37:00	26.3	7.1	146		7.6	3
WEHTZ	Wheeler	TRM	295.9	Transition	06/23/2003	9:37:00	26.3	7.1	146		7.6	5
WEHTZ	Wheeler	TRM	295.9	Transition	06/23/2003	9:37:00	26.2	7.1	146		7.6	7
WEHTZ	Wheeler	TRM	295.9	Transition	06/23/2003	9:37:00	26.2	7	146		7.6	9
WEHTZ	Wheeler	TRM	295.9	Transition	06/23/2003	9:37:00	26.2	7	146		7.7	9.2
WEHTZ	Wheeler	TRM	295.9	Transition	07/10/2003	9:11:18	26.89	7.18	157	90.8	7.14	8.2
WEHTZ	Wheeler	TRM	295.9	Transition	07/10/2003	9:11:48	26.89	7.18	153	88.3	6.94	8
WEHTZ	Wheeler	TRM	295.9	Transition	07/10/2003	9:12:24	26.89	7.19	154	86.9	6.84	7
WEHTZ	Wheeler	TRM	295.9	Transition	07/10/2003	9:13:03	26.93	7.2	156	87.2	6.85	5
WEHTZ	Wheeler	TRM	295.9	Transition	07/10/2003	9:13:32	27	7.21	156	87.5	6.87	3
WEHTZ	Wheeler	TRM	295.9	Transition	07/10/2003	9:14:24	27.06	7.24	156	88.4	6.94	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	07/10/2003	9:14:59	27.1	7.27	155	87.5	6.86	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	08/25/2003	8:49:19	29.44	7.15	163	90.3	6.81	9.4
WEHTZ	Wheeler	TRM	295.9	Transition	08/25/2003	8:50:14	29.42	7.16	170	88.1	6.64	9
WEHTZ	Wheeler	TRM	295.9	Transition	08/25/2003	8:50:49	29.48	7.18	169	89.3	6.73	7
WEHTZ	Wheeler	TRM	295.9	Transition	08/25/2003	8:51:30	29.64	7.17	173	87.6	6.58	5
WEHTZ	Wheeler	TRM	295.9	Transition	08/25/2003	8:51:58	29.65	7.18	171	88.2	6.63	3
WEHTZ	Wheeler	TRM	295.9	Transition	08/25/2003	8:52:41	29.66	7.22	169	88.6	6.65	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/25/2003	8:53:17	29.66	7.24	172	88.5	6.65	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	09/10/2003	9:18:13	27.36	7.21	167	81.7	6.4	7.8
WEHTZ	Wheeler	TRM	295.9	Transition	09/10/2003	9:18:59	27.38	7.2	169	80.3	6.29	7
WEHTZ	Wheeler	TRM	295.9	Transition	09/10/2003	9:19:47	27.57	7.2	169	79.4	6.19	5
WEHTZ	Wheeler	TRM	295.9	Transition	09/10/2003	9:20:30	27.68	7.21	170	78.2	6.09	3

WEHTZ	Wheeler	TRM	295.9 Transition	09/10/2003	9:21:01	27.68	7.21	170	77.9	6.06	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	09/10/2003	9:21:37	27.68	7.23	170	78.2	6.09	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	10/08/2003	9:22:38	21.86	7.34	166	83.6	7.25	7.9
WEHTZ	Wheeler	TRM	295.9 Transition	10/08/2003	9:23:32	21.85	7.31	163	83.5	7.24	7
WEHTZ	Wheeler	TRM	295.9 Transition	10/08/2003	9:24:06	21.86	7.31	166	82	7.11	5
WEHTZ	Wheeler	TRM	295.9 Transition	10/08/2003	9:24:45	21.86	7.33	166	81.7	7.09	3
WEHTZ	Wheeler	TRM	295.9 Transition	10/08/2003	9:25:44	21.87	7.35	165	81.3	7.04	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	10/08/2003	9:26:18	21.87	7.37	165	81.2	7.04	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	04/06/2004	7:11:30	14.22	7.2	170	118.5	12.01	7.7
WEHTZ	Wheeler	TRM	295.9 Transition	04/06/2004	7:13:07	14.23	7.43	170	156.9	15.89	7
WEHTZ	Wheeler	TRM	295.9 Transition	04/06/2004	7:13:52	14.26	7.49	167	164.4	16.63	5
WEHTZ	Wheeler	TRM	295.9 Transition	04/06/2004	7:14:30	14.26	7.56	167	166.2	16.82	3
WEHTZ	Wheeler	TRM	295.9 Transition	04/06/2004	7:15:08	14.26	7.68	166	133.1	13.48	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	04/06/2004	7:15:59	14.29	7.74	167	154.8	15.66	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	05/04/2004	9:27:11	19.05	7.62	169	86.8	7.97	8.6
WEHTZ	Wheeler	TRM	295.9 Transition	05/04/2004	9:27:46	19.05	7.55	170	87.8	8.06	8
WEHTZ	Wheeler	TRM	295.9 Transition	05/04/2004	9:28:33	19.1	7.53	169	87.7	8.04	6
WEHTZ	Wheeler	TRM	295.9 Transition	05/04/2004	9:29:18	19.14	7.48	164	87.8	8.04	4
WEHTZ	Wheeler	TRM	295.9 Transition	05/04/2004	9:29:54	19.16	7.47	164	86.7	7.94	3
WEHTZ	Wheeler	TRM	295.9 Transition	05/04/2004	9:30:26	19.21	7.46	161	86.8	7.94	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	05/04/2004	9:30:58	19.3	7.46	161	88.6	8.09	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	06/08/2004	9:29:44	26.02	7.47	162	84	6.76	8.4
WEHTZ	Wheeler	TRM	295.9 Transition	06/08/2004	9:30:26	26.02	7.45	165	83.5	6.71	8
WEHTZ	Wheeler	TRM	295.9 Transition	06/08/2004	9:31:14	26.12	7.37	168	76.4	6.13	6
WEHTZ	Wheeler	TRM	295.9 Transition	06/08/2004	9:31:49	26.19	7.36	169	75.2	6.03	4
WEHTZ	Wheeler	TRM	295.9 Transition	06/08/2004	9:32:21	26.24	7.34	172	77.2	6.18	3
WEHTZ	Wheeler	TRM	295.9 Transition	06/08/2004	9:32:51	26.29	7.36	168	79.9	6.39	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	06/08/2004	9:33:30	26.65	7.37	171	81.1	6.45	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	07/14/2004	11:16:00	28.5	7.1	186		6.8	7.7
WEHTZ	Wheeler	TRM	295.9 Transition	07/14/2004	11:17:00	28.5	7.1	188		6.8	7
WEHTZ	Wheeler	TRM	295.9 Transition	07/14/2004	11:18:00	28.6	7.1	188		6.7	5
WEHTZ	Wheeler	TRM	295.9 Transition	07/14/2004	11:19:00	28.7	7.1	189		7.1	3
WEHTZ	Wheeler	TRM	295.9 Transition	07/14/2004	11:20:00	29.4	7.6	186		8.6	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	07/14/2004	11:21:00	29.4	7.7	187		8.7	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	08/11/2004	11:00:05	28.02	7.34	195	77.3	5.95	7.9
WEHTZ	Wheeler	TRM	295.9 Transition	08/11/2004	11:00:51	28.09	7.32	194	78.2	6.01	7
WEHTZ	Wheeler	TRM	295.9 Transition	08/11/2004	11:01:33	28.35	7.3	197	74.7	5.71	5

WEHTZ	Wheeler	TRM	295.9 Transition	08/11/2004	11:02:18	28.43	7.31	196	76.4	5.84	3
WEHTZ	Wheeler	TRM	295.9 Transition	08/11/2004	11:02:56	28.48	7.32	197	77.7	5.93	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	08/11/2004	11:03:44	28.56	7.33	196	77.3	5.89	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	09/08/2004	12:36:33	26.26	7.39	195	93.2	7.35	8.2
WEHTZ	Wheeler	TRM	295.9 Transition	09/08/2004	12:37:55	26.29	7.38	196	92.3	7.28	8
WEHTZ	Wheeler	TRM	295.9 Transition	09/08/2004	12:38:48	26.29	7.39	196	91.9	7.24	7
WEHTZ	Wheeler	TRM	295.9 Transition	09/08/2004	12:39:46	26.33	7.39	197	92.6	7.3	5
WEHTZ	Wheeler	TRM	295.9 Transition	09/08/2004	12:40:37	26.57	7.39	194	92.6	7.26	3
WEHTZ	Wheeler	TRM	295.9 Transition	09/08/2004	12:41:19	26.62	7.41	195	92.9	7.28	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	09/08/2004	12:41:57	26.63	7.43	196	91.8	7.19	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	10/06/2004	10:55:47	22.16	7.51	149	87.3	7.56	8.5
WEHTZ	Wheeler	TRM	295.9 Transition	10/06/2004	10:56:43	22.17	7.46	149.2	89.7	7.77	8
WEHTZ	Wheeler	TRM	295.9 Transition	10/06/2004	10:57:22	22.33	7.44	149.4	89.7	7.75	6
WEHTZ	Wheeler	TRM	295.9 Transition	10/06/2004	10:58:16	22.55	7.42	152	88.2	7.58	4
WEHTZ	Wheeler	TRM	295.9 Transition	10/06/2004	10:58:51	22.57	7.41	151	87.5	7.52	3
WEHTZ	Wheeler	TRM	295.9 Transition	10/06/2004	10:59:35	22.65	7.39	150	87.8	7.54	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	10/06/2004	11:00:06	22.9	7.38	150	89.7	7.67	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	04/11/2005	11:45:16	17.13	7.68	157	95.5	9.03	7.5
WEHTZ	Wheeler	TRM	295.9 Transition	04/11/2005	11:46:12	17.13	7.64	156	94.6	8.94	6
WEHTZ	Wheeler	TRM	295.9 Transition	04/11/2005	11:46:53	17.13	7.6	157	93.8	8.87	4
WEHTZ	Wheeler	TRM	295.9 Transition	04/11/2005	11:47:25	17.13	7.58	156	94	8.89	3
WEHTZ	Wheeler	TRM	295.9 Transition	04/11/2005	11:48:15	17.13	7.56	156	93	8.79	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	04/11/2005	11:48:55	17.14	7.55	158	93	8.79	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	05/03/2005	11:02:23	17.26	7.75	150	87.9	8.36	7.7
WEHTZ	Wheeler	TRM	295.9 Transition	05/03/2005	11:03:07	17.26	7.71	155	87.9	8.36	7
WEHTZ	Wheeler	TRM	295.9 Transition	05/03/2005	11:03:56	17.36	7.68	155	86	8.16	5
WEHTZ	Wheeler	TRM	295.9 Transition	05/03/2005	11:05:23	17.51	7.62	156	84.6	8.01	3
WEHTZ	Wheeler	TRM	295.9 Transition	05/03/2005	11:06:16	17.62	7.61	157	84.4	7.97	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	05/03/2005	11:06:53	18.21	7.58	161	85.8	8	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	06/08/2005	9:41:57	24.35	7.51	162	71.6	5.88	7.8
WEHTZ	Wheeler	TRM	295.9 Transition	06/08/2005	9:42:34	24.36	7.43	163	71.3	5.85	7
WEHTZ	Wheeler	TRM	295.9 Transition	06/08/2005	9:43:14	24.59	7.39	163	77.5	6.33	5
WEHTZ	Wheeler	TRM	295.9 Transition	06/08/2005	9:43:46	24.79	7.41	168	88.7	7.21	3
WEHTZ	Wheeler	TRM	295.9 Transition	06/08/2005	9:44:24	25.09	7.56	167	101.9	8.25	1.5
WEHTZ	Wheeler	TRM	295.9 Transition	06/08/2005	9:44:58	25.72	7.46	165	88.1	7.04	0.3
WEHTZ	Wheeler	TRM	295.9 Transition	07/13/2005	10:11:17	27.19	7.48	160	69.7	5.45	7.8
WEHTZ	Wheeler	TRM	295.9 Transition	07/13/2005	10:11:58	27.22	7.48	159	69.8	5.45	7

WEHTZ	Wheeler	TRM	295.9	Transition	07/13/2005	10:12:49	27.31	7.46	164	70.9	5.53	5
WEHTZ	Wheeler	TRM	295.9	Transition	07/13/2005	10:14:41	27.38	7.45	158	71.4	5.56	3
WEHTZ	Wheeler	TRM	295.9	Transition	07/13/2005	10:15:21	27.45	7.44	159	73.9	5.75	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	07/13/2005	10:16:09	27.45	7.43	162	72	5.6	0.3
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/2005	9:03:56	29.44	7.29	150	69.8	5.24	7.9
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/2005	9:04:32	29.49	7.3	149	70.5	5.29	7
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/2005	9:05:12	29.54	7.29	145.3	71.7	5.37	5
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/2005	9:05:46	29.55	7.28	144.3	71.7	5.37	3
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/2005	9:06:20	29.56	7.28	144.3	72.2	5.41	1.5
WEHTZ	Wheeler	TRM	295.9	Transition	08/10/2005	9:06:52	29.61	7.28	144.1	72.9	5.45	0.3

ATTACHMENT 4

Browns Ferry Nuclear Plant (BFN)

Dissolved Oxygen Profiles Taken

On August 31, 2005

Locations: TRM 293.3 (Below BFN Mixing Zone)
TRM 293.9 (BFN Mixing Zone)
TRM 295.9 (Above BFN Mixing Zone)

Station ID	Reservoir Name	River Mile	Sample Location	Date MMDDYY	Time HHMMSS	Temp degC	pH units	SpCond uS/cm	DO %Sat	DO mg/l	Depth meters
WEHTZ	Wheeler	TRM 293.3	Below Mixing Zone	08/31/2005	9:56:10 AM	30.75	7.43	143.9	82.7	6.05	0.3
WEHTZ	Wheeler	TRM 293.3	Below Mixing Zone	08/31/2005	9:55:41 AM	29.36	7.42	143.2	76.7	5.74	1.5
WEHTZ	Wheeler	TRM 293.3	Below Mixing Zone	08/31/2005	9:54:14 AM	28.83	7.45	143	75.7	5.72	3
WEHTZ	Wheeler	TRM 293.3	Below Mixing Zone	08/31/2005	9:53:25 AM	28.26	7.46	143.1	79.3	6.05	4
WEHTZ	Wheeler	TRM 293.3	Below Mixing Zone	08/31/2005	9:52:55 AM	27.92	7.46	142.3	80.1	6.15	5
WEHTZ	Wheeler	TRM 293.3	Below Mixing Zone	08/31/2005	9:51:44 AM	27.74	7.45	140.4	80	6.16	6
WEHTZ	Wheeler	TRM 293.3	Below Mixing Zone	08/31/2005	9:51:10 AM	27.21	7.42	138.6	78.6	6.11	7
WEHTZ	Wheeler	TRM 293.3	Below Mixing Zone	08/31/2005	9:50:40 AM	27.17	7.41	138.6	77.2	6.01	8
WEHTZ	Wheeler	TRM 293.3	Below Mixing Zone	08/31/2005	9:49:52 AM	27.17	7.42	138.5	75.5	5.88	8.4
WEHTZ	Wheeler	TRM 293.9	Mixing Zone	08/31/2005	10:10:16 AM	29.7	7.4	142.6	78	5.81	0.3
WEHTZ	Wheeler	TRM 293.9	Mixing Zone	08/31/2005	10:09:47 AM	29.65	7.39	142.3	78.2	5.83	1.5
WEHTZ	Wheeler	TRM 293.9	Mixing Zone	08/31/2005	10:09:04 AM	29.57	7.39	142.5	78.2	5.83	3
WEHTZ	Wheeler	TRM 293.9	Mixing Zone	08/31/2005	10:08:34 AM	29.38	7.39	142.2	77	5.76	4
WEHTZ	Wheeler	TRM 293.9	Mixing Zone	08/31/2005	10:07:58 AM	29.34	7.39	142.1	76.3	5.72	5
WEHTZ	Wheeler	TRM 293.9	Mixing Zone	08/31/2005	10:07:26 AM	29.17	7.4	142	75.1	5.64	6
WEHTZ	Wheeler	TRM 293.9	Mixing Zone	08/31/2005	10:06:54 AM	28.22	7.4	140.8	79	6.03	7
WEHTZ	Wheeler	TRM 293.9	Mixing Zone	08/31/2005	10:06:21 AM	27.9	7.4	140.9	79.6	6.12	8
WEHTZ	Wheeler	TRM 293.9	Mixing Zone	08/31/2005	10:05:58 AM	27.39	7.39	138.7	77	5.97	9
WEHTZ	Wheeler	TRM 293.9	Mixing Zone	08/31/2005	10:05:14 AM	27.37	7.39	138.6	76.3	5.91	9.8
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	08/31/2005	10:25:00 AM	28.22	7.47	147	78.5	6	0.3
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	08/31/2005	10:24:29 AM	27.65	7.42	146.6	74.8	5.77	1.5
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	08/31/2005	10:23:57 AM	27.42	7.42	146	73.7	5.71	3
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	08/31/2005	10:23:21 AM	27.34	7.43	145.7	75.4	5.85	4
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	08/31/2005	10:22:56 AM	27.23	7.43	145.2	75.4	5.86	5
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	08/31/2005	10:22:23 AM	27.19	7.43	145.1	74.3	5.78	6
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	08/31/2005	10:21:54 AM	27.04	7.43	144.8	73.1	5.7	7
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	08/31/2005	10:21:27 AM	27.03	7.41	145	72.5	5.66	7.4

ATTACHMENT 5

Browns Ferry Nuclear Plant (BFN)

Dissolved Oxygen Profiles Taken

On September 14, 2005

Locations: TRM 293.3 (Below BFN Mixing Zone)
TRM 293.9 (BFN Mixing Zone)
TRM 295.9 (Above BFN Mixing Zone)

Station ID	Reservoir Name	River Mile	Sample Location	Date MMDDYY	Time HHMMSS	Temp degC	pH units	SpCond uS/cm	DO %Sat	DO mg/l	Depth meters
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	09/14/2005	11:02:36 AM	27.41	7.3	147	67.3	5.23	8.3
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	09/14/2005	11:03:14 AM	27.4	7.31	146	68.9	5.36	7
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	09/14/2005	11:03:53 AM	27.42	7.32	149.4	70.7	5.5	5
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	09/14/2005	11:04:39 AM	27.47	7.31	149.3	70.2	5.46	3
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	09/14/2005	11:05:23 AM	27.56	7.32	146	69.7	5.41	1.5
WEHTZ	Wheeler	TRM 295.9	Above Mixing Zone	09/14/2005	11:05:58 AM	27.74	7.31	149.5	71.5	5.53	0.3
WEHMZ	Wheeler	TRM 293.9	Mixing Zone	09/14/2005	11:17:00 AM	27.62	7.29	152	70.2	5.44	10.2
WEHMZ	Wheeler	TRM 293.9	Mixing Zone	09/14/2005	11:17:30 AM	28.16	7.28	152	71.1	5.46	9
WEHMZ	Wheeler	TRM 293.9	Mixing Zone	09/14/2005	11:18:23 AM	28.18	7.28	152	71.1	5.46	8
WEHMZ	Wheeler	TRM 293.9	Mixing Zone	09/14/2005	11:18:53 AM	28.01	7.29	149	71.7	5.52	7
WEHMZ	Wheeler	TRM 293.9	Mixing Zone	09/14/2005	11:19:18 AM	28.28	7.29	152	72.1	5.53	6
WEHMZ	Wheeler	TRM 293.9	Mixing Zone	09/14/2005	11:19:44 AM	28.45	7.28	153	71.9	5.49	5
WEHMZ	Wheeler	TRM 293.9	Mixing Zone	09/14/2005	11:20:11 AM	28.64	7.28	152	71.5	5.44	4
WEHMZ	Wheeler	TRM 293.9	Mixing Zone	09/14/2005	11:20:53 AM	28.67	7.28	152	71.2	5.42	3
WEHMZ	Wheeler	TRM 293.9	Mixing Zone	09/14/2005	11:21:24 AM	28.78	7.28	153	70.8	5.37	1.5
WEHMZ	Wheeler	TRM 293.9	Mixing Zone	09/14/2005	11:21:53 AM	28.72	7.28	152	71.6	5.44	0.3
WEHBZ	Wheeler	TRM 293.3	Below Mixing Zone	09/14/2005	11:27:59 AM	27.95	7.24	151	64.6	4.98	8
WEHBZ	Wheeler	TRM 293.3	Below Mixing Zone	09/14/2005	11:28:27 AM	27.95	7.25	152	66.9	5.15	7
WEHBZ	Wheeler	TRM 293.3	Below Mixing Zone	09/14/2005	11:28:53 AM	28.15	7.25	148	66.4	5.1	6
WEHBZ	Wheeler	TRM 293.3	Below Mixing Zone	09/14/2005	11:29:21 AM	28.49	7.29	149	71	5.42	5
WEHBZ	Wheeler	TRM 293.3	Below Mixing Zone	09/14/2005	11:30:01 AM	28.57	7.3	149.6	71.7	5.47	4
WEHBZ	Wheeler	TRM 293.3	Below Mixing Zone	09/14/2005	11:30:39 AM	28.63	7.29	149.2	71.7	5.46	3
WEHBZ	Wheeler	TRM 293.3	Below Mixing Zone	09/14/2005	11:31:16 AM	28.86	7.27	151	72	5.46	1.5
WEHBZ	Wheeler	TRM 293.3	Below Mixing Zone	09/14/2005	11:31:50 AM	30	7.24	154	73.2	5.44	0.3

ATTACHMENT 6

Browns Ferry Nuclear Plant (BFN)

3-D Simulations of Diffuser Thermal Effluent

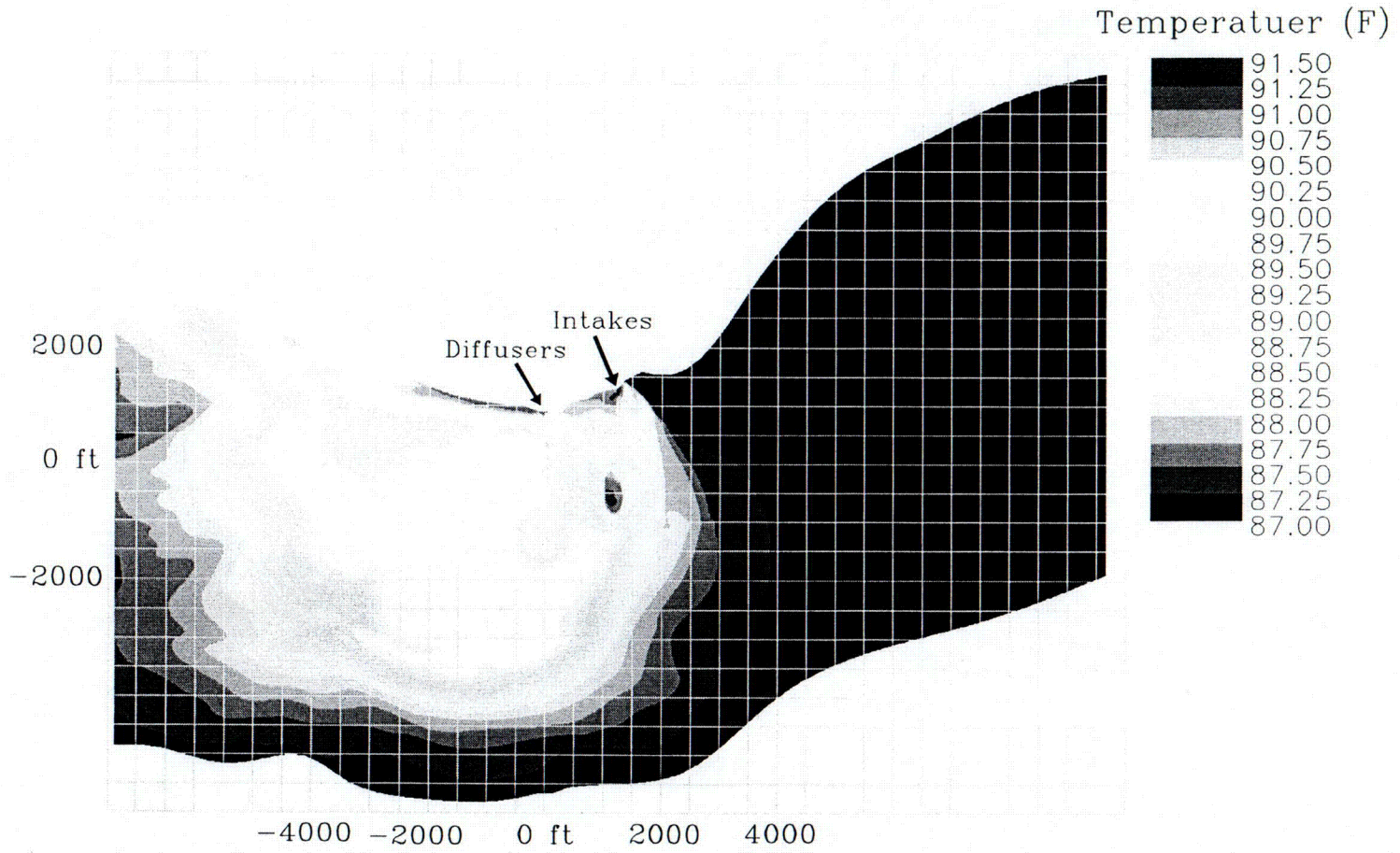
BFN 3-D Simulations Of Diffuser Thermal Effluent

October 24, 2005

Model Conditions

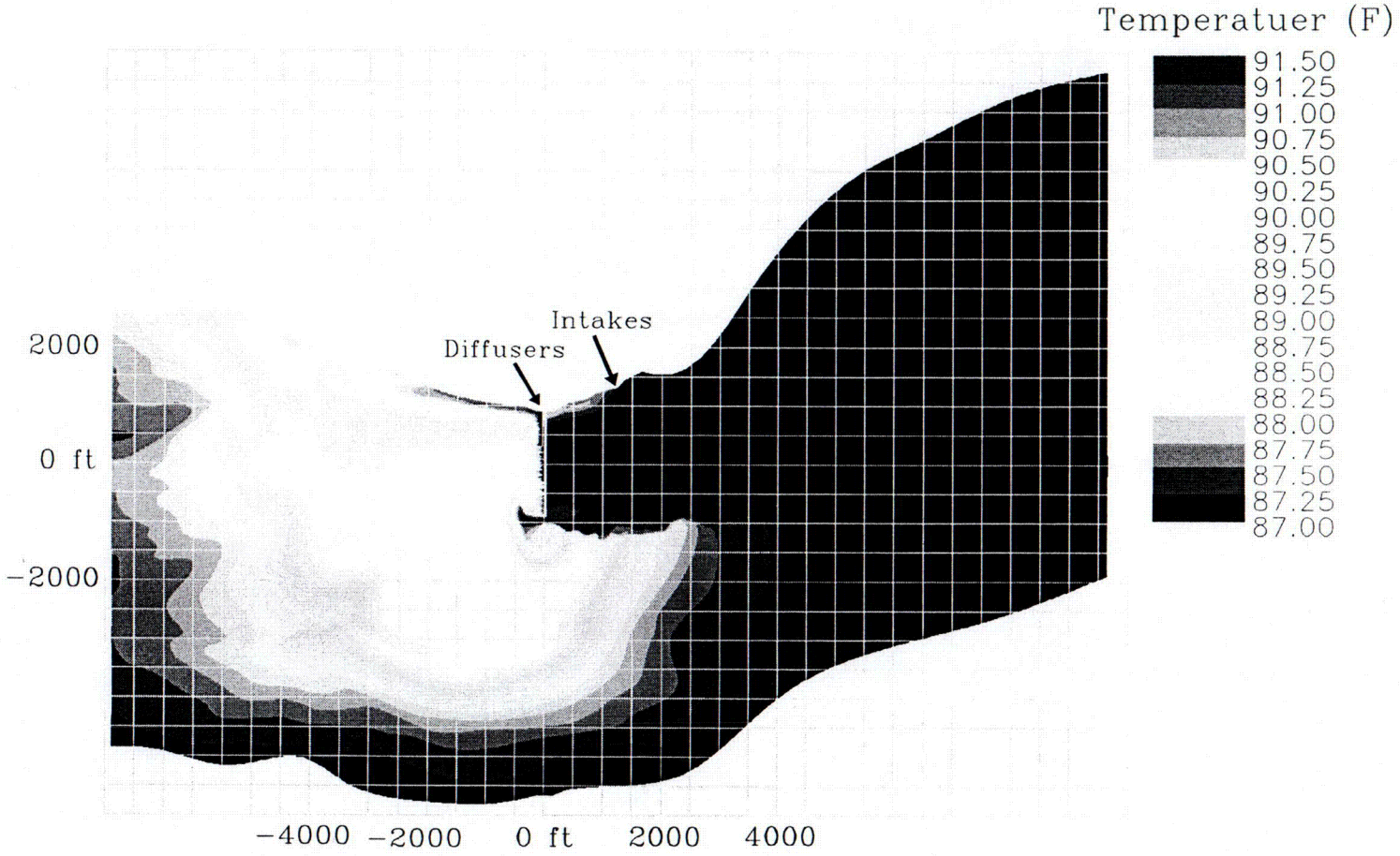
- River
  - Flow 10,000 cfs
  - Upstream ambient temperature 87°F
- BFN
  - Three units in service and operating at extended power uprate (120 percent of original licensed thermal power)
  - Six cooling towers – four Ecodyne 16 cell towers, one Balcke-Durr 16 cell tower, and one Balcke-Durr 20 cell tower
  - All cooling towers in service
  - Intake flow 4490 cfs
  - Diffuser flow (all three units combined) 4410 cfs
  - Diffuser effluent temperature 97.4°F

Temperature Distribution on Water Surface

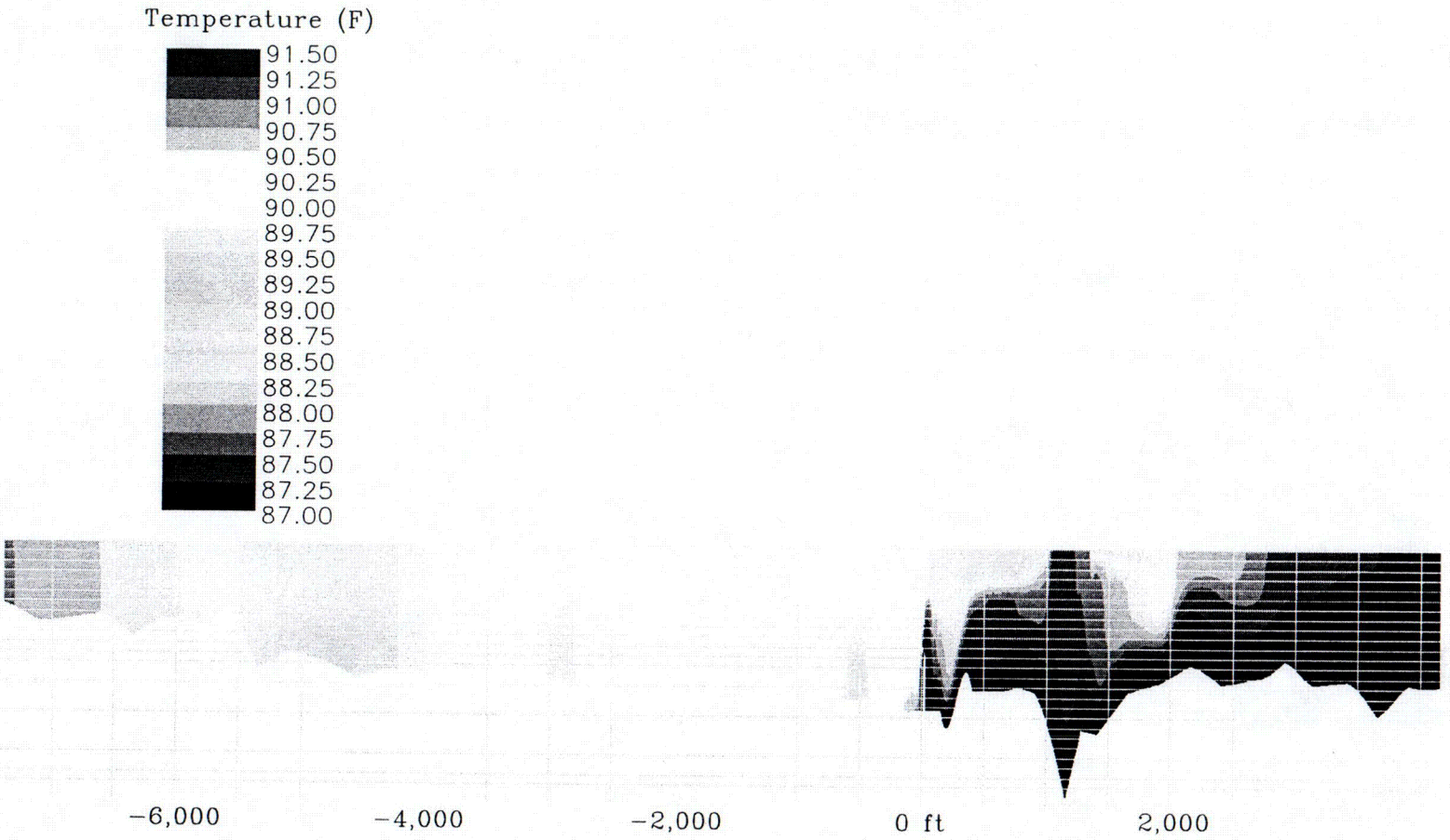


TVA

Temperature Distribution on Channel Bottom

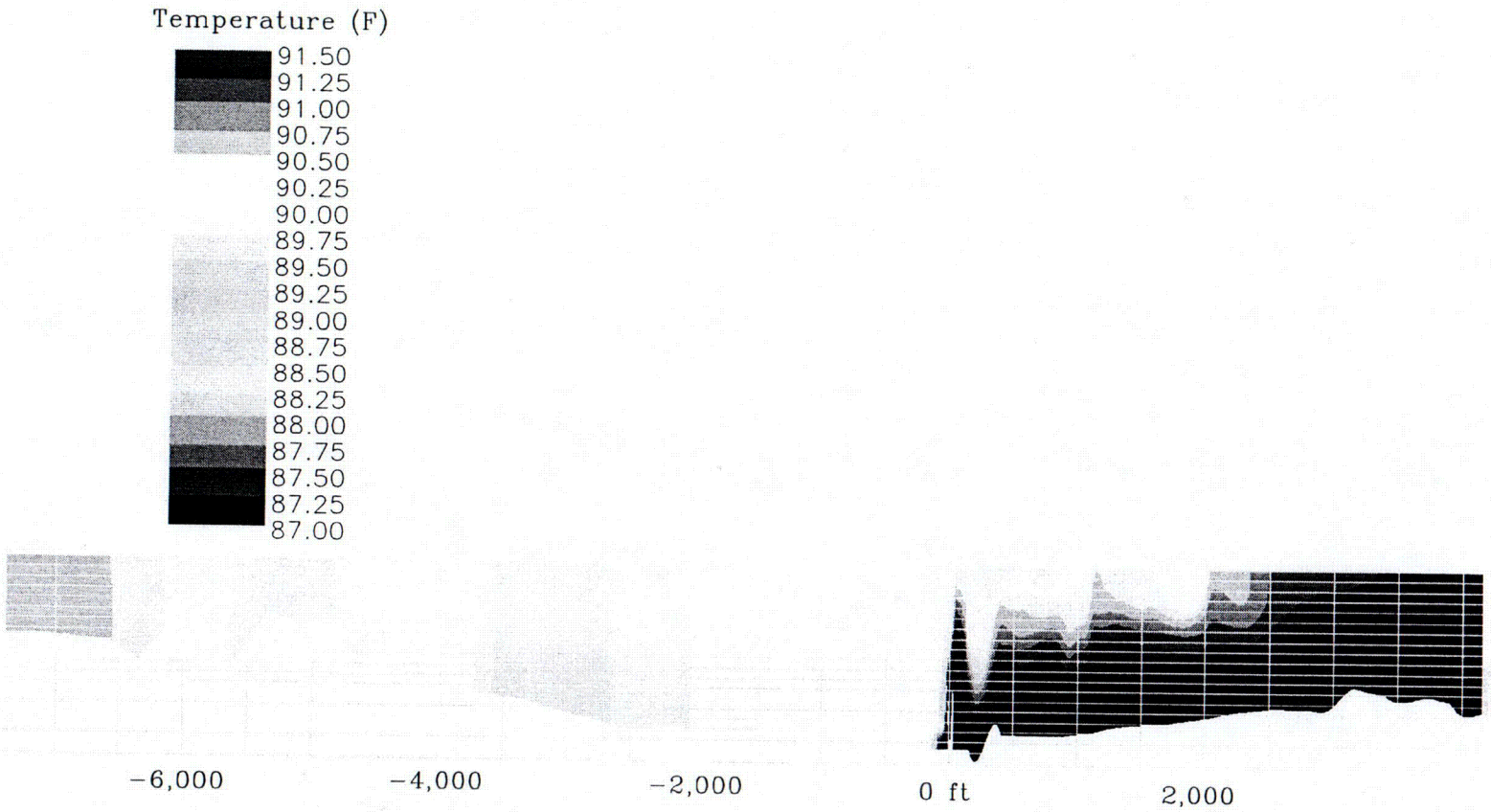


Water Temperature Contours on Central Plane of Unit 2



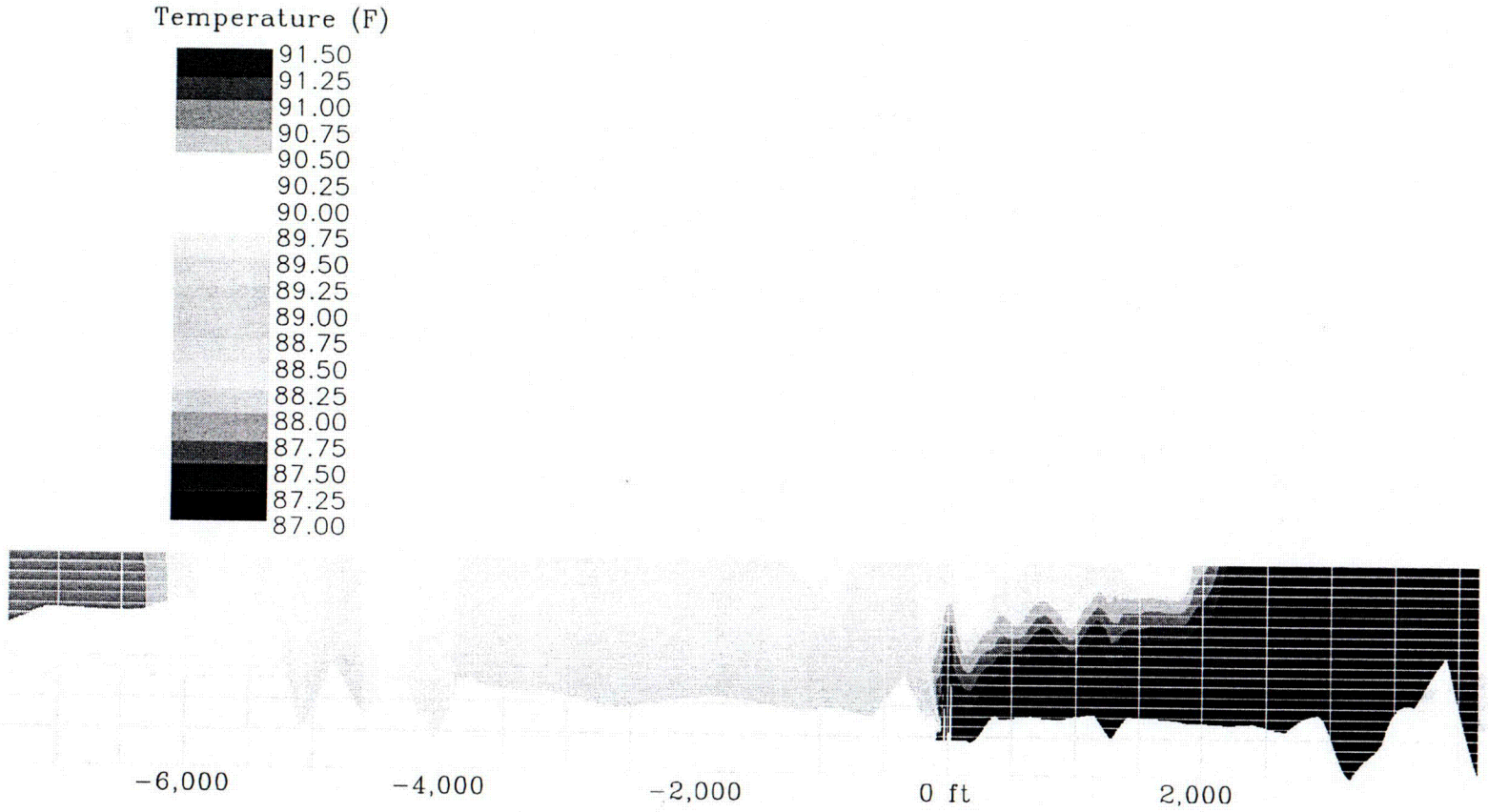
TVA

Water Temperature Contours on Central Plane of Unit 1



TVA

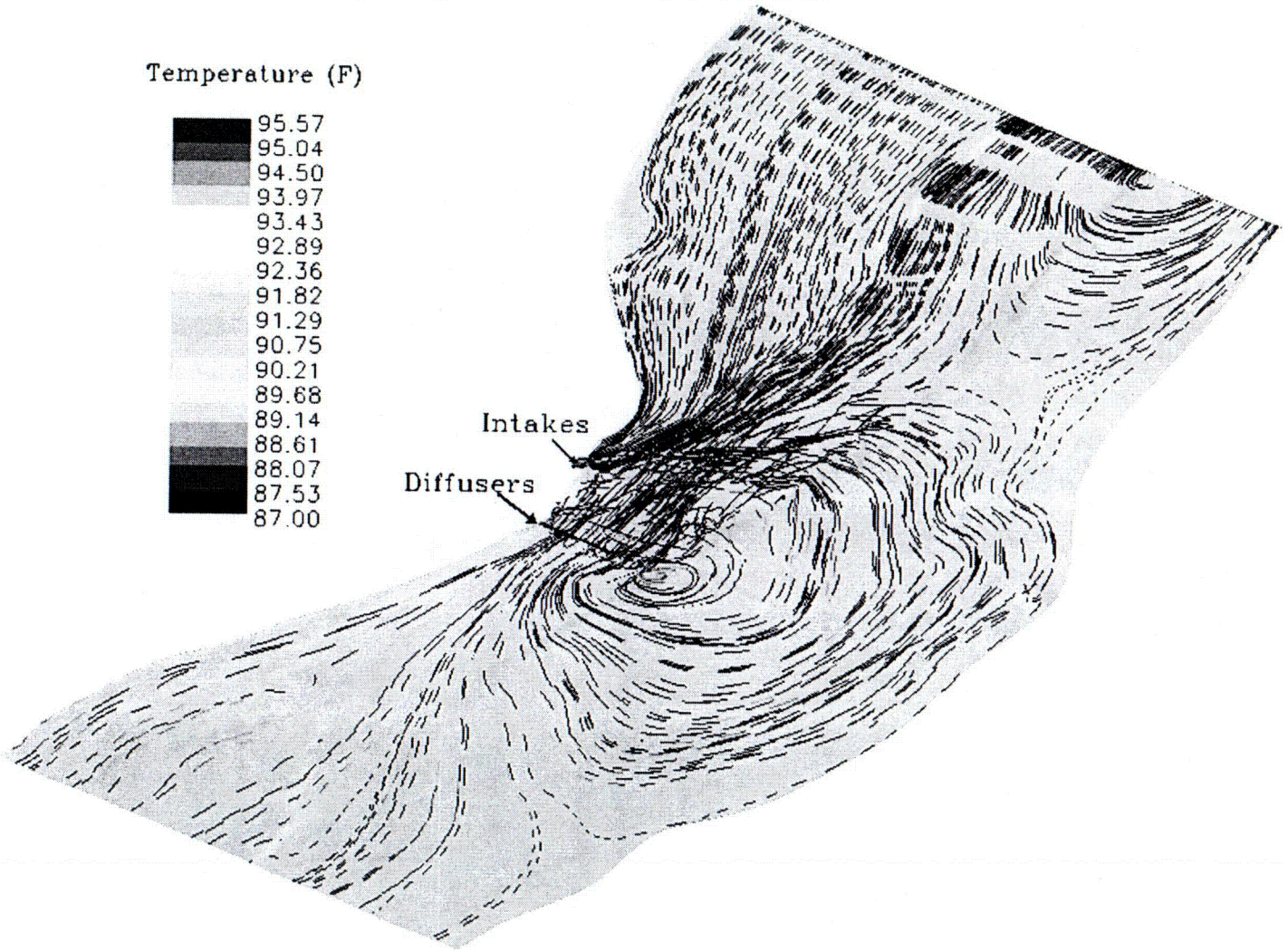
Water Temperature Contours on Central Plane of Unit 3



TVA

Streamlines

Red: Streamlines through intakes
Blue: Streamlines through river inlet
Colored by Temp: Streamlines from diffusers



TVA

Table 1. Class Definitions for vegetation management of TVA Transmission ROW's

&

Table 2. Class Definitions and Associated Polygon Colors of Sensitive Areas for line or pole maintenance on TVA transmission

Table 1. Class Definitions for vegetation management of TVA Transmission ROW's

Terrestrial Plants (A), Terrestrial Animals (D), and Aquatic Animals (E)			
Class	**Restriction if Sensitive area in ROW**	**Restriction for Sensitive Areas Potentially Affected**	**Polygon Color**
1	No broadcast spraying. Use one of the three following alternatives: 1) Hand or mechanical clearing, 2) Request field surveys by TVA Heritage staff to determine if suitable habitat for these species exists in the subject area, 3) Selective spraying of herbicides to shrubs or tree saplings less than 12 feet in height.	Not Applicable	Yellow
2	Hand-clearing only. Vehicles and equipment restricted from area unless confined to existing access road.	Vehicles and equipment restricted from area unless confined to existing access road.	Red
3	Special circumstance (specified by documentation accompanying that ROW review). **Botany:** listed plant recorded from within ROW. Please contact Heritage botanist prior to entering or conducting maintenance activities in subject area. **Terrestrial Animals:** if project occurs during the breeding season (March to mid-July), a Heritage terrestrial zoologist must be contacted prior to conducting the work. If outside this time period, no restrictions are necessary.		Orange
Wetlands* (C)			
-	Wetlands obtained from National Wetland Inventory data. Refer to "Wetlands ROW and Pole Replacement Guidelines" for restrictions.		Blue Outline
1	Potential wetlands identified by Natural Heritage wetland biologists based on interpretation of topographic features, water bodies, soil surveys and proximity to NWI features. Wetlands biologists will make recommendations specific to the situation		Pink Outline
Natural Areas (B)			
Class	**Call***	**Definition**	**Color**
1	No	Same as Class 1 definition above.	Yellow
2	No	Same as Class 2 definition above.	Red
1	Yes	Same as Class 1 definition above, and **must contact area manager** prior to	Yellow hatching
2	Yes	Same as Class 2 definition above, and **must contact area manager** prior to entering or conducting maintenance in subject area.	Red hatching
3	Yes	**Must contact area manager** prior to entering or conducting maintenance in subject area.	Neon Green
4		Special circumstance (specified by documentation accompanying that ROW review).	Green

* Refer to Wetlands Statement included in this package.

** The "Call" column on the accompanying datasheets is used by Natural Area specialists only.
A blank in the column indicates no call is necessary.

ble 2. Class Definitions and Associated Polygon Colors of Sensitive Areas for line or pole maintenance on TVA transmission lines.

All Resources Areas (Plants, Natural Areas, Wetlands, Terrestrial Animals, and Aquatic Animals)		
Class	**Restriction**	**Color**
1	**Botany**: Sensitive Botanical resources are known from the area. Details of proposed activities should be submitted to TVA Heritage staff to determine if the proposed activities require restrictions. **Natural Areas**: Refer to table accompanying project for restrictions. **Wetlands**: Potential wetlands identified by Natural Heritage wetland biologists based on interpretation of topographic features, water bodies, soil surveys and proximity to NWI features. Refer to wetlands ROW and pole replacement guidelines (below) for restrictions. **Terrestrial Animals**: Refer to table accompanying project for restrictions. **Aquatic Animals**: Refer to table accompanying project for restrictions.	Pink
Wetlands		
-	Wetlands obtained from National Wetland Inventory data. Wetlands biologists will make recommendations specific to the situation	Blue Outline