# ATTACHMENT FF

Bad River Band of Lake Superior Chippewa
Mashkiiziibii Natural Resources Department
72682 Maple Street
Odanah, WI 54861
715-682-7123

# FISHERIES REPORT

Jacob Rodmaker, MNRD Fisheries Specialist

March 22, 2022

## I. INTRODUCTION

This report was prepared by Jacob Rodmaker, the Fisheries Specialist for the Mashkiiziibii Natural Resources Department ("MNRD") since 2019, for purposes of submission to the United States Army Corps of Engineers ("Corps") Public Notice on the permit application for the Enbridge Line 5 Wisconsin Segment Relocation Project ("Project").

## II. RELEVANT DATA

The MNRD has a long history of operating a fish hatchery on Kakagon River and completing fisheries assessments and habitat surveys within the Bad River Watershed and Lake Superior waters. Such assessments include assisting the USFWS with Lake Sturgeon population assessments on the Bad and White Rivers, assisting USFWS with Sea Lamprey control on the Bad and White Rivers and their tributaries, and assisting the EPA with the National Rivers and Streams Assessments on multiple streams and rivers within the Bad River watershed.

## III. REVIEW

Various relevant data from Enbridge's Environmental Impact Report (March 2020) was reviewed in consideration of impacts on fisheries by Line 5:

- 5.5.3 (Existing Environment. Vegetation, Wildlife, and Fisheries. Fisheries)
- 6.5.3 (Environmental Effects. Vegetation, Wildlife, and Fisheries. Fisheries)
- 7.3.4 (Secondary and Cumulative Impacts. Cumulative Impact Analysis. Vegetation, Wildlife, and Fisheries)
- 8.1.9 (Conclusions. Fisheries)

## IV. FINDINGS

- (5.5.3) The company fails to acknowledge the White River, below the Highway 112 crossing, as sensitive fish habitat. It is known that Lake Sturgeon, a sensitive fish species, spawn within the area between the Highway 112 and Highway 13 crossings **(*see* Attachment 1)**. Lake Sturgeon are currently under review for being listed under the Endangered Species Act. Habitat loss, specifically spawning habitat, is one of the leading causes for Lake Sturgeon population declines.

- (6.5.3) It is pertinent to consider more than just instream work that changes habitat. With the presence of the pipeline and access routes, these activities can alter and adversely affect habitat and fisheries through hydrological changes and sedimentation from up-slope or upstream work.

- (6.5.3) While this is not technically wrong the company describes the catfishes in the water bodies as "catfish (Siluriformes spp.)." Siluriformes refers to the order of fish that all catfish fall under. This encompasses over 3,000 species. To be more correct the company should have used the family, Ictaluridae, this encompasses 51 species, 9 of which are found in Wisconsin.

- (6.5.3) The inadvertent release of drilling fluid plan in the EPP is geared more towards terrestrial clean up with waterbody clean up seeming like an afterthought.

- (7.3.4) With the construction of the pipeline there are likely going to be changes in hydrology. Annual and ephemeral streams could have their waterways diverted, changing the hydrology of perennial streams. This could add additional sedimentation to perennial streams during large rain and snow melt events. Added sedimentation could greatly affect the populations of fish downstream.

## V. FURTHER INFORMATION REQUIRED

Additional information is needed in order for MNRD and the Corps to develop informed findings on project impacts and permitting decisions, including a federal EIS and what is listed below:

- (5.5.3) The company obviously did not do any independent fisheries sampling in preparation for this EIR. The company did list some of the species within the systems they have proposed to cross, but there are many important species that they omit from their EIR. Quality fisheries assessments should be done to adequately describe the existing environment for the fisheries present.

- (6.5.3) A proper protocol for mitigating an inadvertent drill fluid release is needed.

- (8.1.9) Due to the absence of the proper current fisheries data it is easy for the company to conclude there will be minimal impacts during and after construction to the fisheries of the proposed project locations. As stated above, proper fisheries assessments need to be conducted upstream and downstream of the construction areas. After proper data is collected (fisheries assessments), data needs to be evaluated and incorporated into a federal EIS to understand potential impacts to the fisheries and habitats they depend upon.

- Lake Superior, the lower reaches of the Bad River, and the Kakagon-Bad River Sloughs complex provide critical habitat, such as nursery habitat for lake sturgeon, walleye, perch and other fish species. A federal EIS is necessary to understand the potential impacts on critical habitat and fisheries from the construction, maintenance, and operational phases of the proposed project. Additionally, a federal EIS needs to evaluate the potential impacts of an oil spill on fisheries and the habitat that they depend upon.

The Mashkiiziibii Natural Resources Department reserves the right to update this report once additional, and more accurate, data becomes available.

## VI. SOURCES & ATTACHMENTS

**References**

- Enbridge, Line 5 Wisconsin Segment Relocation Project: Environmental Impact Report (March 2020)

**Attachments**

Attachment 1. William P. Mattes & Julie Nelson, Great Lakes Indian Fish & Wildlife Commission, Lake Sturgeon Project on the White River in Wisconsin During 2001 (2001), available at http://glifwc.org/Fisheries/GreatLakes/Name%20Project%20during%202001.pdf

# MNRD Fisheries Report

## Attachment 1

# Name′ (Lake Sturgeon) Project

# on the White River in Wisconsin

# during 2001

by

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**Great Lakes Section Leader**

and

**Julie Nelson**
**Great Lakes Section Fisheries Aide**

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**EPA-CEM Grant #X975411-01 FY 2001**

Attachment 1 to MNRD Fisheries Report

## Acknowledgments

We would like to thank the Environmental Protection Agency Coastal Environmental Management program, the members of the Aquatic Committee of the Lake Superior Binational Program, and the Lake Superior Technical Committee of the Great Lakes Fisheries Commission, for their support of this project.

We would like to thank two individuals and cooperators, Rick Huber with the Bad River Natural Resources Department and Henry Quinlan with the U.S. Fish and Wildlife Service. Also, we would like to thank the GLIFWC seasonal employees who worked on this project, Ben Basley, Abby LaBarre, and Brandie Cheatham. Finally, we would like to thank Mike Plucinski, Great Lakes Technician for his assistance in training the seasonal employees, and Dennis Pratt of the Wisconsin Department of Natural Resources for the historical reference on the White River falls location.

## Abstract

This project addressed an issue identified as a high priority by both the Aquatic Community Committee of the Lake Superior Binational Program and the Lake Superior Technical Committee of the Great Lakes Fishery Commission; namely, to determine the current population status and abundance of lake sturgeon in Lake Superior tributaries where spawning occurred historically and to quantify sturgeon spawning habitat in those streams (LSTC 2001, LaMP 2000). This project found evidence of adult lake sturgeon successfully using the upper reaches of the White River, a tributary stream to the Bad River, by the capture of drifting larval lake sturgeon near State Highway 13. Habitat data for depth and substrate were collected in the areas where interviews with anglers indicated lake sturgeon were spawning.

## Introduction

This project addressed an issue identified as a high priority by both the Aquatic Community Committee of the Lake Superior Binational Program and the Lake Superior Technical Committee of the Great Lakes Fishery Commission; namely, to determine the current population status and abundance of lake sturgeon in Lake Superior tributaries where spawning occurred historically and to quantify sturgeon spawning habitat in those streams (LSTC 2001, LaMP 2000).

Lake sturgeon in the Great Lakes became scarce due to habitat destruction and over fishing during the early 1900s. Rehabilitation efforts are occurring but restoration will be slow, due in part to the reproductive characteristics of the species. Lake sturgeon do not spawn until they are around 4 feet in length and 12 to 20 years old. Previously, there were only two known spawning populations of lake sturgeon in the U.S. waters of Lake Superior - the Bad River in Wisconsin and the Sturgeon River in Michigan (LSTC 2001).

Lake sturgeon are classified as a "Species of Special Concern" by the U.S. Fish and Wildlife Service. They are also classified as "Threatened" by the State of Michigan. The Fond du Lac Band of Lake Superior Chippewa, Red Cliff Band of Lake Superior Chippewa, Bad River Band of Lake Superior Chippewa, Keweenaw Bay Indian Community, and Bay Mills Indian Community have identified lake sturgeon as a culturally sensitive species under the American Indian Natural Heritage Restoration Program. The harvest and sharing of *name* (lake sturgeon) is important to the culture of the Anishinaabe people. These fish continue to be harvested for ceremonial and subsistence purposes by tribal members.

Work on the White River, Wisconsin (Ashland County) was done during April to June 2001 to gather and compile biological and movement information on adult lake sturgeon ascending the river during the spring spawning run and on larval lake sturgeon drifting downstream in the river after spawning occurred (Figure 1). Also, physical habitat information (depth and substrate) was taken in the area where interviews with local anglers indicated that lake sturgeon were spawning.

It has long been suspected that lake sturgeon spawn in the White River, but evidence of spawning has never been documented (Schram, personal communication). The area below the White River dam was likely the upper limit for spawning by lake sturgeon in the river because according to an historical account in the June 3, 1882 edition of the Ashland Press, a falls of 16 feet existed on the river at the present dam location. However, changes in flow due to the operation of the hydroelectric facility may currently affect lake sturgeon spawning success (Auer, 1996).

## Methods

At the beginning of the annual spawning run, lake sturgeon were captured in large mesh gill nets in the White River near the confluence with the Bad River as part of an ongoing project between the U.S. Fish and Wildlife Service (USFWS) and the Bad River Natural Resources Department (BRNRD) on the Bad River Indian Reservation (Figure 2). All lake sturgeon captured were checked for tags, sampled for biological information, tagged with a Passive Internal Transponder (PIT) tag and a radio tag and released (Figures 3 and 4). In an attempt to observe adult lake sturgeon during the spawning season GLIFWC crews walked sections of the river from three access points: the White River dam, off the south end of Beaser Avenue in Ashland, and the State Highway 13 bridge. Also, fishermen at the White River dam site were interviewed. To detect radio tagged fish using telemetry equipment the river between the White River dam and State Highway 13 was canoed periodically (Appendix A). At the conclusion of the spawning run, drift nets were set for larval lake sturgeon near State Highway 13 (Figure 1).

Physical habitat characteristics (depth and substrate) were recorded for areas reportedly used by spawning lake sturgeon. Depth was recorded using a standard habitat pole marked in 10 cm increments, while substrate was recorded following the modified Wentworth scale (Nielsen and Johnson 1983). Measurements were taken every meter along transects located every 20 meters throughout the study area where interviews with local anglers indicated that lake sturgeon were spawning (Figure 1).

Suitability index (SI) values for the components of substrate and depth were calculated using a model developed for lake sturgeon (Threader, et al. 1998), and an average suitability index (SI) was calculated for each transect. Three transects were given zero values because data for the transects were incomplete. Transects 1-17 were located in the by-pass channel between the White River dam and the powerhouse, while transects 18-41 were in an area below the powerhouse where anglers reported that lake sturgeon were caught.

## Results

Twenty-one lake sturgeon were captured in large mesh gill nets in the White River near the confluence with the Bad River during May 4-18, 2001 (Quinlan, personal communication) (Table 1). During this sampling period two lake sturgeon were recaptured the day after they were originally tagged. From April 16 to May 18 attempts were made between State Highway 13 and the White River dam to recapture lake sturgeon at upstream locations by using large mesh gill nets, to locate them with radio telemetry equipment, and to visually observe them (Appendix A). No adult lake sturgeon were recaptured, located with telemetry equipment, or observed. However, interviews with local anglers indicated that adult lake sturgeon were spawning on a gravel bar directly downstream from the White River dam powerhouse (Figure 5).

Four larval lake sturgeon were captured in five nights of sampling during May 30 to June 13, 2001 with larval drift nets in the White River near the State Highway 13 crossing (Figures 1 and 6, Appendix A). Each lake sturgeon was sampled for length (Table 2) and all but one were released alive into the river near the point of capture (Figure 7). The capture of larval lake sturgeon near State Highway 13 indicated that lake sturgeon spawning occurred upstream of this area on the White River.

Physical habitat characteristics (depth and substrate) were recorded for areas reportedly used by spawning lake sturgeon (Figure 8, Appendix B). These areas appeared to have substrate and water depth suitable for lake sturgeon spawning. Based on the criteria developed for the substrate and depth components of spawning lake sturgeon habitat by Threader et al. (1998), the average suitability index (SI) values for each of the 41 transects ranged from 0.1 to 0.86 for substrate and from 0.23 to 1.0 for depth. A SI value of zero indicates poor suitability while 1.0 indicates excellent suitability for spawning lake sturgeon.

Transects 1-17, located in the by-pass channel (the original streambed) between the White River dam and the powerhouse, tended to have a lower SI values than those calculated for transects 18-41, an area below the powerhouse where anglers reported that lake sturgeon were caught (Appendix A). The lower SI's in the by-pass channel are likely due to two factors. First, the bypass channel is maintained at a minimum flow of about 16 cubic feet per second, with the remainder of the stream flow being diverted through the powerhouse of the hydroelectric facility. Due to this relatively low flow, the depth within the channel was shallow (average 23.8 cm) which resulted in low SI values for depth. Secondly, the channel consists largely of bedrock, which has a SI value of 0.3. Threader et al. (1998) noted their model was developed in streams where bedrock was uncommon, and that lake sturgeon populations from Wisconsin exhibit some preference for bedrock as spawning substrate. Thus, using this model for Wisconsin streams may be a model weakness underestimate substrate suitability.

## Conclusion

Prior to this study only two spawning populations of lake sturgeon were confirmed in rivers along the south shore of Lake Superior, the Bad River in Wisconsin and the Sturgeon River in Michigan. The capture of larval lake sturgeon near State Highway 13 confirms that lake sturgeon spawn upstream of this area on the White River. In addition, physical habitat (substrate and depth) was suitable for lake sturgeon to spawn successfully during 2001 in the area of the White River from the dam to downstream of the powerhouse (Appendix B).

## References

Auer, N.A. 1996. Response of spawning lake sturgeons to change in hydroelectric facility operation. Transaction of the American Fisheries Society 125:66-77.

Nielsen, L.A. and D.L. Johnson (ed.) 1983. Fisheries Techniques. Southern Printing Company, Inc., Blacksburg, Virginia.

Lake Superior Lakewide Management Plan (LaMP). 2000. Lake Superior Binational Program. April 2000.

Lake Superior Technical Committee (LSTC). 2001. A lake sturgeon rehabilitation plan for Lake Superior- July 2, 2001 Draft. Great Lakes Fisheries Commission, 2100 Commonwealth Blvd., Suite 209, Ann Arbor, Michigan.

Schram, Steve. Personal Communication. Wisconsin Department of Natural Resources, 141 S. 3rd Street, Bayfield, Wisconsin, 54814.

Threader R.W., R.J. Pope and P.R.H. Schaap. 1998. Development of a habitat suitability index model for lake sturgeon. Report No. H-07015.01-0012. Hydroelectric Ontario Canada. January 1998.

Quinlan, Henry. Personal Communication. U.S. Fish and Wildlife Service, 1400 E. Lake Shore Drive, Ashland, Wisconsin, 54806.

Table 1. Biological and tag data from USFWS for 19 lake sturgeon captured at the confluence of the White and Bad Rivers in Wisconsin during May 2001. Note that fish were marked with 2-3 different types of tags and that fish with ID numbers 2663 and 2701 were captured twice during May 2001 and fish 2160 was a recapture of a sturgeon initially tagged by the Wisconsin DNR in Chequamegon Bay on June 4, 1991.

| | TOTAL | FORK | | | | | Tag 1 | | | | Tag 2 | | | Tag 3 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | LENGTH (cm) | LENGTH (cm) | GIRTH (cm) | WEIGHT (lbs) | SEX | AGE | ID | AGENCY | COLOR | TYPE | ID | AGENCY | TYPE | ID | AGENCY | TYPE |
| 4 | 1050 | 950 | 360 | 15 | M | | 2728 | USFWS | GREEN | Floy tag | 42286D262C | USFWS | PIT | 152.343 | USFWS | Radio |
| 4 | 1320 | 1210 | 500 | 36 | F | | 2731 | USFWS | GREEN | Floy tag | 42254D3F12 | USFWS | PIT | 152.103 | USFWS | Radio |
| 5 | 1290 | 1170 | 470 | 28 | M | | 2653 | USFWS | GREEN | Floy tag | 42256C5C7C | USFWS | PIT | 152.163 | USFWS | Radio |
| 6 | 1210 | 1090 | 420 | 16 | M | | 2656 | USFWS | GREEN | Floy tag | 422874586F | USFWS | PIT | | | |
| 7 | 1070 | 980 | 410 | 15 | U | | 2661 | USFWS | GREEN | Floy tag | 422566337D | USFWS | PIT | 153.334 | USFWS | Radio |
| 8 | 1110 | 1010 | 350 | 16 | M | 19 | 2663 | USFWS | GREEN | Floy tag | 4229014B60 | USFWS | PIT | 153.303 | USFWS | Radio |
| 9 | 1450 | 1330 | 570 | 45 | U | | 2668 | USFWS | GREEN | Floy tag | 42253C344D | USFWS | PIT | 153.123 | USFWS | Radio |
| 9 | 1340 | 1230 | 470 | 30 | M | | 2669 | USFWS | GREEN | Floy tag | 4228741264 | USFWS | PIT | 153.472 | USFWS | Radio |
| 9 | 1230 | 1120 | 420 | 19 | M | | 2670 | USFWS | GREEN | Floy tag | 42260A4173 | USFWS | PIT | 153.790 | USFWS | Radio |
| 9 | 1250 | 1140 | 460 | 22 | M | | 2671 | USFWS | GREEN | Floy tag | 4225637F10 | USFWS | PIT | 153.273 | USFWS | Radio |
| 9 | 1110 | 1010 | 350 | 16 | M | | 2663 | USFWS | GREEN | Floy tag | 4229014B60 | USFWS | PIT | 153.303 | USFWS | Radio |
| 10 | 1040 | 930 | 370 | 11 | U | | 2673 | USFWS | GREEN | Floy tag | 4229047F1F | USFWS | PIT | | | |
| 10 | 1310 | 1210 | 290 | 29 | M | | 2674 | USFWS | GREEN | Floy tag | 4225502127 | USFWS | PIT | 153.003 | USFWS | Radio |
| 11 | 1180 | 1060 | 400 | 15 | M | | 2700 | USFWS | GREEN | Floy tag | 4226042B47 | USFWS | PIT | 152.374 | USFWS | Radio |
| 11 | 1130 | 1030 | 370 | 15 | M | | 2701 | USFWS | GREEN | Floy tag | 4229080411 | USFWS | PIT | | | |
| 12 | 1470 | 1350 | 460 | 36 | F | | 2705 | USFWS | GREEN | Floy tag | 422555201C | USFWS | PIT | | | |
| 12 | 1010 | 920 | 330 | 12 | M | | 2706 | USFWS | GREEN | Floy tag | 42256E495C | USFWS | PIT | | | |
| 13 | 1130 | 1030 | 370 | 15 | M | | 2701 | USFWS | GREEN | Floy tag | 4229080411 | USFWS | PIT | | | |
| 14 | 1230 | 1130 | 450 | 33 | M | | 2708 | USFWS | GREEN | Floy tag | 42286C2222 | USFWS | PIT | | | |
| 15 | 1510 | 1370 | 470 | 35 | F | | 2709 | USFWS | GREEN | Floy tag | 42254D7519 | USFWS | PIT | | | |
| 18 | 1150 | 1040 | 400 | 12 | M | | 2160 | USFWS | GREEN | Floy tag | 421C40302D | USFWS | PIT | 426 | WIDNR | Monal |

Table 2. Drift net capture data from the White River near Wisconsin State Highway 13 from May 30 to June 13, 2001.

| | | Sample Time | | | | | Water | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Month | Day | Start | Finish | Species* | Length | Number | Clarity | Flow | Temp. | Comments |
| 5 | 30 | 9:11 | 9:27 | UND LARVAL | | 1 | TURBID | NORMAL | 58 | WATER LEVEL DROPPED AFTER SECOND TOW |
| 5 | 30 | 9:31 | 10:01 | LAS | 19 | 1 | | | | |
| 5 | 30 | | | CMS | | 1 | | | | |
| 5 | 30 | | | UND LARVAL | | 16 | | | | |
| 5 | 30 | 9:43 | 10:15 | UND LARVAL | | 13 | | | | |
| 5 | 30 | 10:13 | 10:49 | UND LARVAL | | 9 | | | | |
| 5 | 30 | 10:29 | 10:58 | UND LARVAL | | 2 | | | | |
| 5 | 30 | 10:59 | 11:30 | UND LARVAL | | 10 | | | | |
| 5 | 30 | 11:06 | 11:38 | UND LARVAL | | 9 | | | | |
| 6 | 5 | 8:54 | 9:15 | UND LARVAL | | 4 | CLOUDY | LOW | 57 | |
| 6 | 5 | 8:55 | 9:23 | NO FISH | | | | | | |
| 6 | 5 | 9:23 | 9:53 | LAS | 20 | 1 | | | | |
| 6 | 5 | | | UND LARVAL | | 8 | | | | |
| 6 | 5 | 9:28 | 10:04 | UND LARVAL | | 6 | | | | |
| 6 | 5 | 10:04 | 10:35 | UND LARVAL | | 9 | | | | |
| 6 | 5 | 10:11 | 10:45 | UND LARVAL | | 7 | | | | |
| 6 | 5 | 10:44 | 11:19 | UND LARVAL | | 7 | | | | |
| 6 | 5 | 10:57 | 11:28 | NO FISH | | | | | | |
| 6 | 5 | 11:27 | 11:58 | LAS | 21 | 1 | | | | |
| 6 | 5 | | | UND LARVAL | | 13 | | | | |
| 6 | 5 | 11:36 | 12:11 | NO FISH | | | | | | |
| 6 | 6 | 8:35 | 9:08 | UND LARVAL | | 10 | CLOUDY | NORMAL | 57 | |
| 6 | 6 | 8:35 | 9:16 | UND LARVAL | | 7 | | | | |
| 6 | 6 | 9:15 | 9:46 | UND LARVAL | | 23 | | | | |
| 6 | 6 | 9:29 | 9:55 | UND LARVAL | | 16 | | | | |
| 6 | 6 | 9:54 | 10:27 | TRP | | 1 | | | | |

Table 2. Continued.

| Month | Day | Sample Time Start | Sample Time Finish | Species | Length | Number | Water Clarity | Water Flow | Water Temp. | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 6 | | | UND LARVAL | | 44 | | | | |
| 6 | 6 | 10:08 | 10:38 | MMN | | 1 | | | | |
| 6 | 6 | | | UND LARVAL | | 44 | | | | |
| 6 | 6 | 10:37 | 11:08 | TRP | | 1 | | | | |
| 6 | 6 | | | UND LARVAL | | 42 | | | | |
| 6 | 6 | 10:55 | 11:20 | CMS | | 1 | | | | |
| 6 | 6 | | | UND LARVAL | | 41 | | | | |
| 6 | 6 | 11:20 | 11:52 | LAS | 23 | 1 | | | | |
| 6 | 6 | | | UND LARVAL | | 104 | | | | |
| 6 | 6 | 11:39 | 12:10 | UND LARVAL | | 104 | | | | |
| 6 | 13 | 8:50 | 9:20 | UND LARVAL | | 227 | CLOUDY | LOW | 68 | WATER LEVEL ROSE AT 12:30 |
| 6 | 13 | 8:50 | 9:34 | UND LARVAL | | 376~ | | | | |
| 6 | 13 | 9:38 | 9:54 | UND LARVAL | | 350~ | | | | |
| 6 | 13 | 10:08 | 10:23 | UND LARVAL | | 370~ | | | | |
| 6 | 13 | 10:15 | 10:35 | UND LARVAL | | 220~ | | | | |
| 6 | 13 | 10:34 | 10:51 | UND LARVAL | | 200~ | | | | |
| 6 | 13 | 10:49 | 11:03 | UND LARVAL | | 100~ | | | | |
| 6 | 13 | 11:01 | 11:35 | UND LARVAL | | 170~ | | | | |
| 6 | 13 | 11:11 | 11:44 | CHUB | | 1 | | | | |
| 6 | 13 | | | UND LARVAL | | 270~ | | | | |
| 6 | 13 | 11:51 | 12:38 | UND LARVAL | | 850~ | | | | |
| 6 | 13 | 12:46 | 1:15 | UND LARVAL | | 1550~ | | | | |

| | | |
|---|---|---|
| *Species key: | Lake sturgeon | LAS |
| | Unidentified larval fish | UND LARVAL |
| | Creek chub | CHUB |
| | Common shiner | CMS |
| | Trout perch | TRP |
| | Mudminnow | MMN |

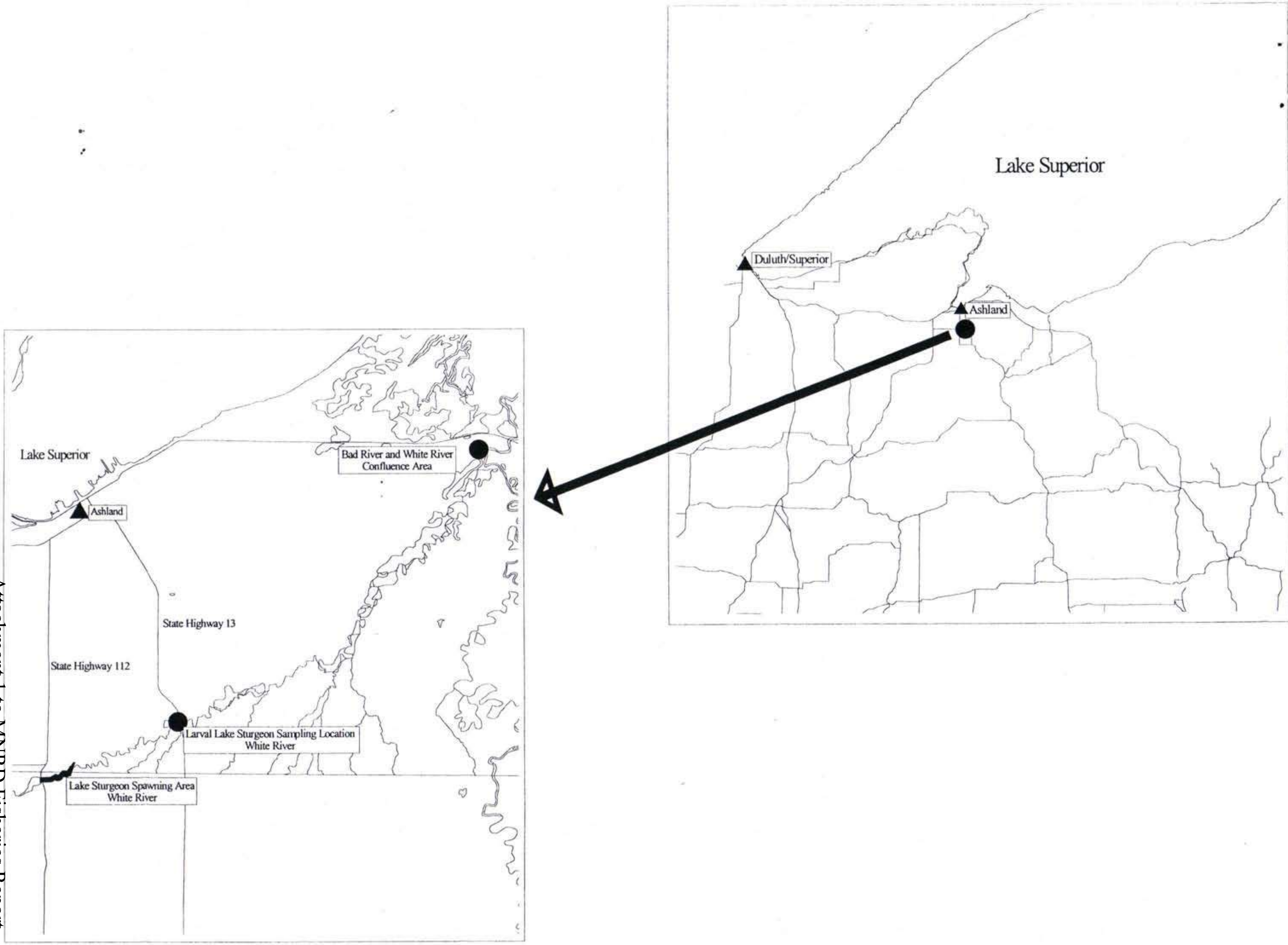


Figure 1. Study area on the White River, Ashland County, Wisconsin.


Figure 2. Lifting large mesh gill net at the confluence of the White and Bad Rivers in Wisconsin (photo by Rick Huber).


Figure 3. Scanning for PIT tag identification number after insertion into adult lake sturgeon ascending the White River during spawning 2001 (photo by Rick Huber).

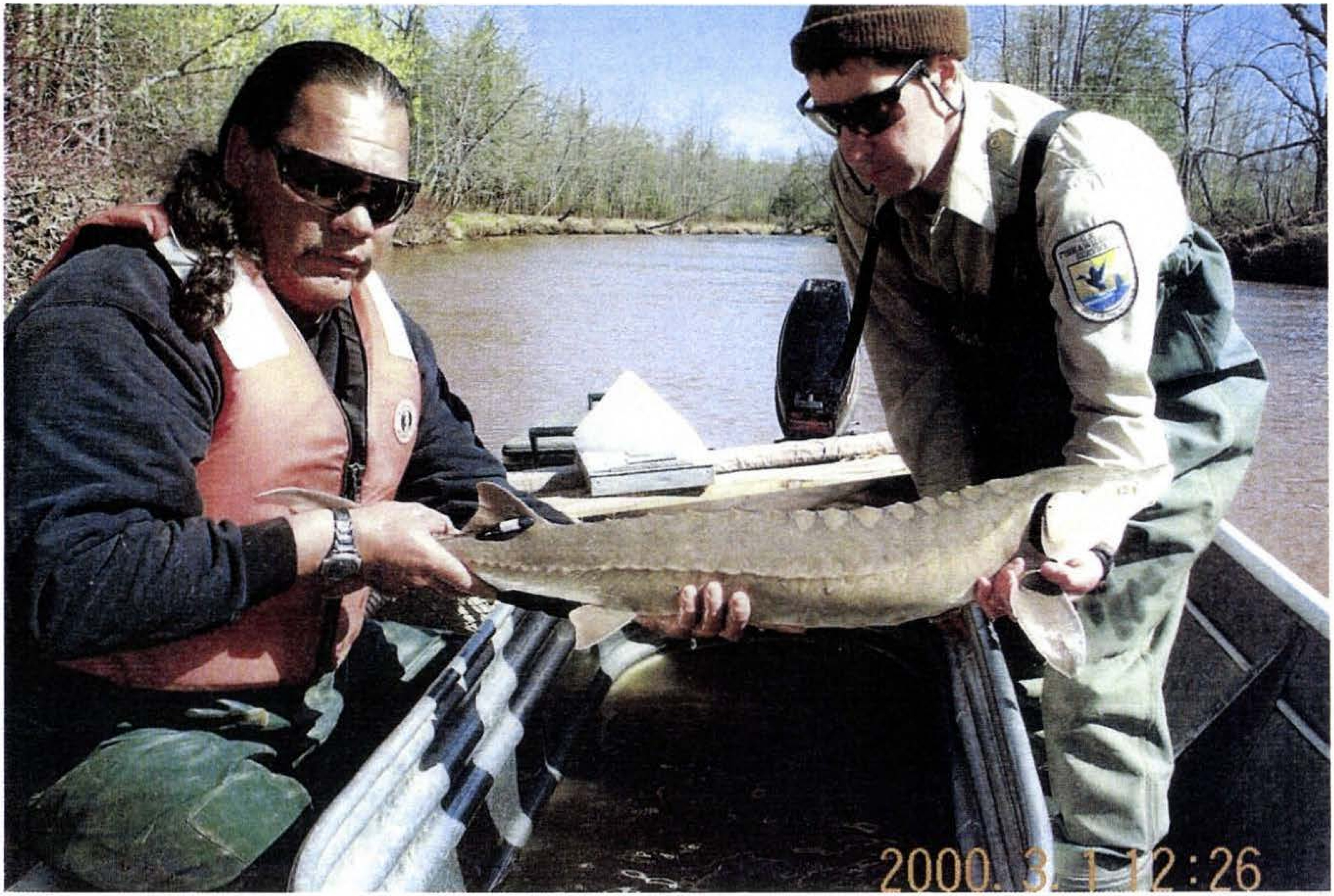


Figure 4. Radio tag in adult lake sturgeon ascending the White River during spawning 2001 (photo by Rick Huber).

Figure 5. Area directly downstream from White River dam powerhouse where local anglers fished for and reported seeing lake sturgeon.

Figure 6. Lifting larval drift net near State Highway 13 on the White River.

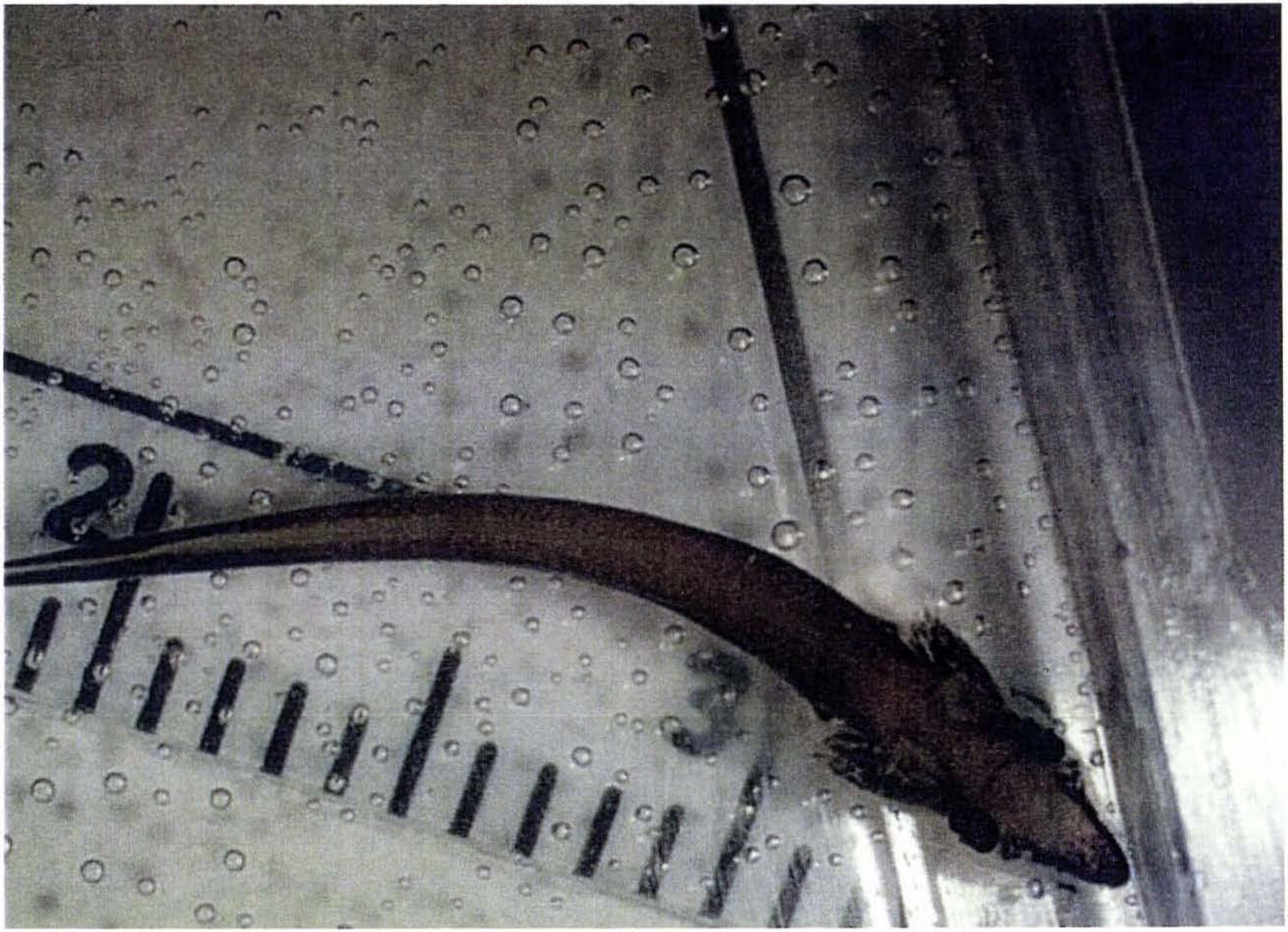

Figure 7. Larval lake sturgeon captured in drift net in the White River near State Highway 13.

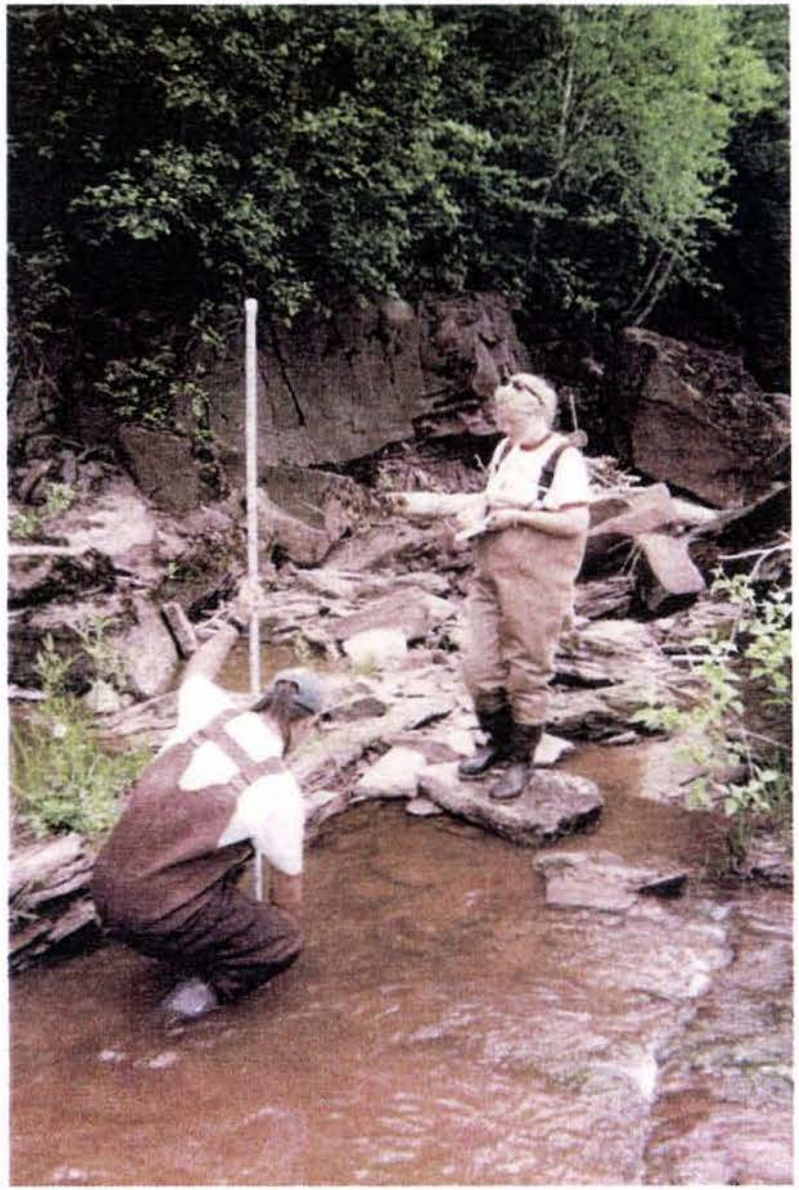

Figure 8. Gathering physical habitat information on the White River, Wisconsin.

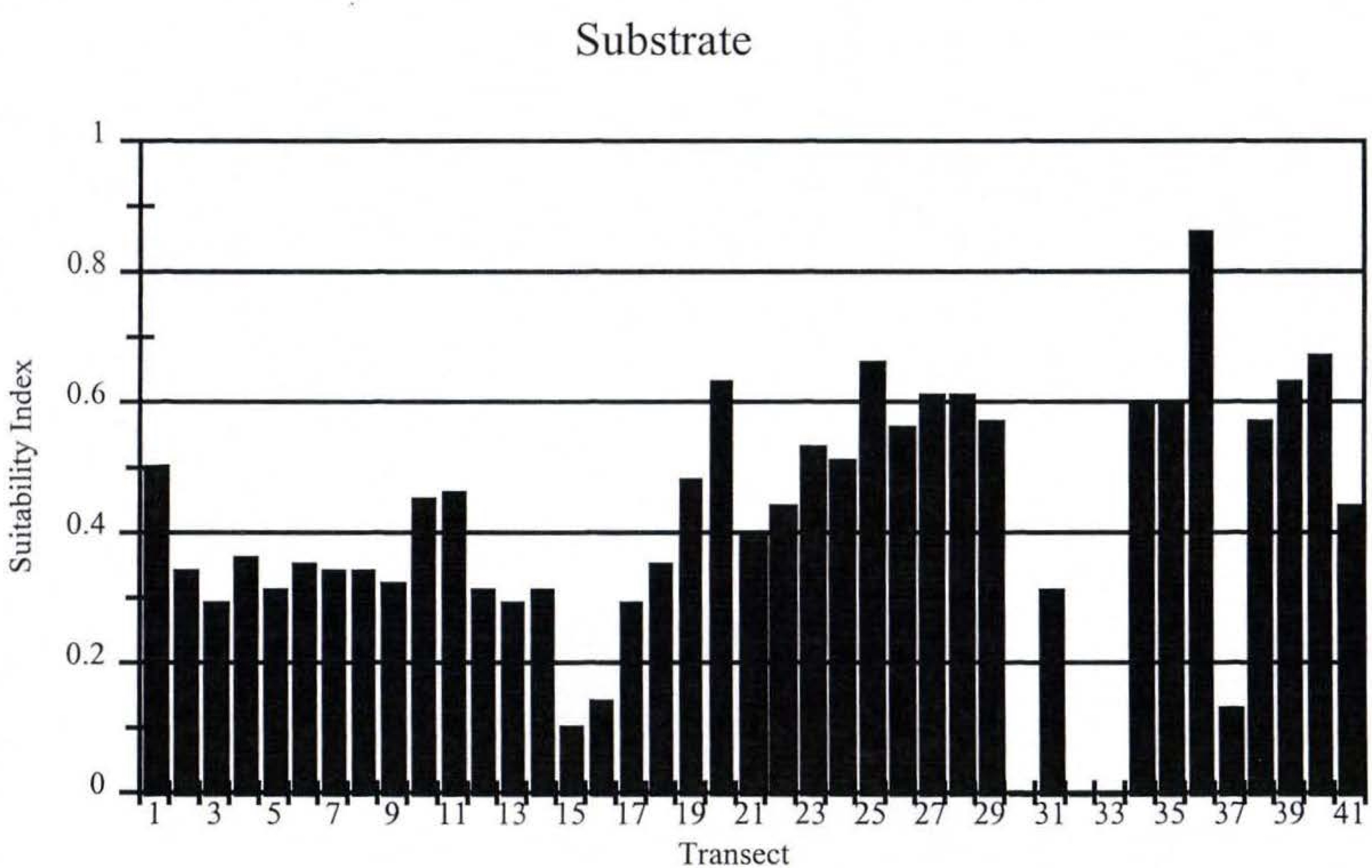


Figure 9. SI values for substrate along transects taken within the White River.

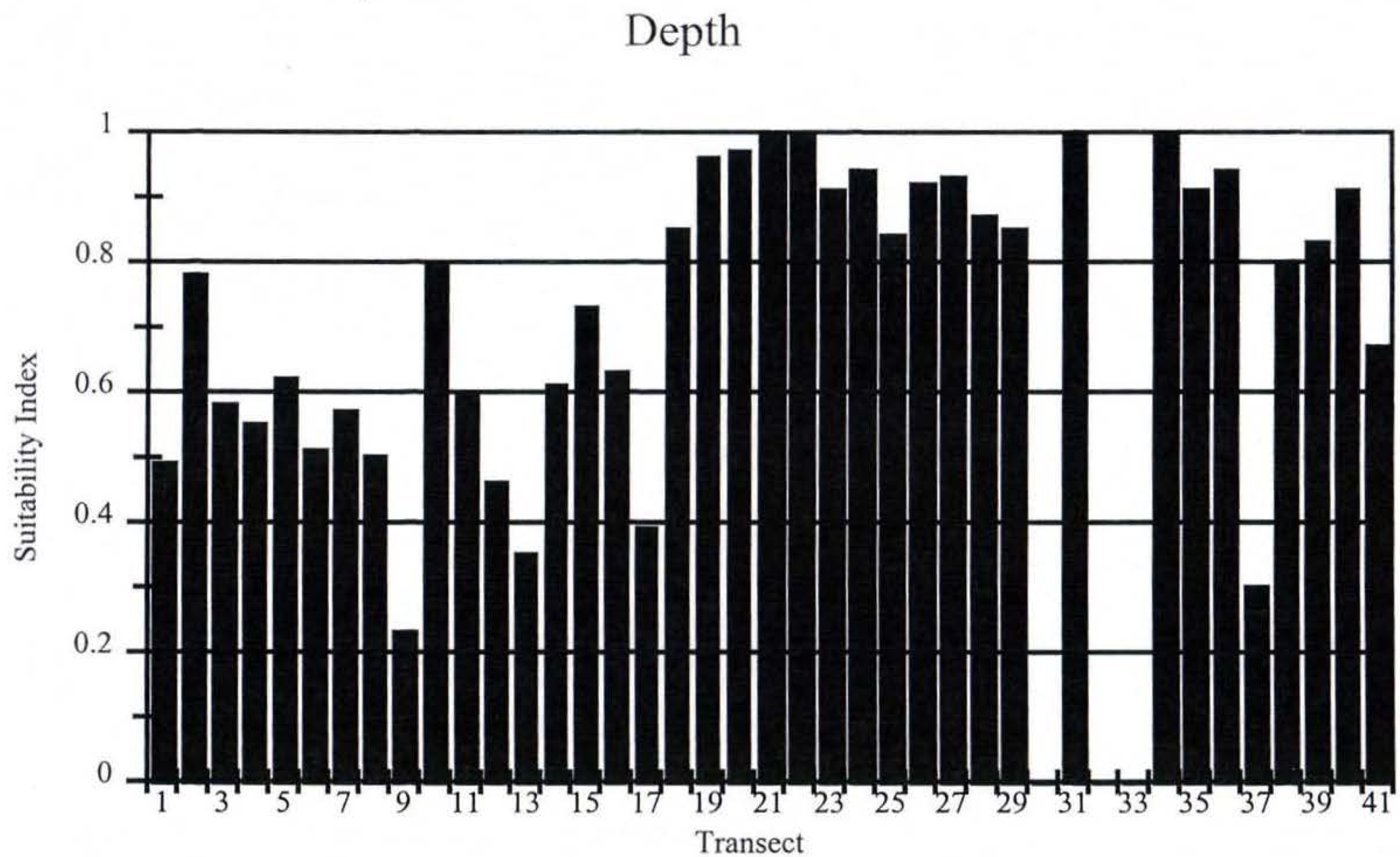


Figure 10. SI values for depth along transects taken within the White River.

Appendix A. Field work activity log on White River, Wisconsin, during 2001 CEM Lake Sturgeon study.

| | | White River dam | | | | | |
|---|---|---|---|---|---|---|---|
| Month | Day | By-pass channel | Spawning area | Beaser access | Hwy 13 bridge | Bad/White confluence | Comments |
| 4 | 16 | visual observation | visual observation | | | | High Flows |
| 4 | 17 | visual observation | visual observation | | | | High Flows |
| 4 | 18 | visual observation | visual observation | | | | High Flows |
| 4 | 19 | visual observation | visual observation | | | | High Flows |
| 4 | 20 | visual observation | visual observation | | | | High Flows |
| 4 | 21 | | | | | Lifted nets | High Flows |
| 4 | 22 | | | | | Lifted nets | High Flows |
| 4 | 23 | visual observation | visual observation | visual observation | visual observation | Lifted nets | High Flows |
| 4 | 24 | visual observation | visual observation | | | Lifted nets | High Flows |
| 4 | 25 | visual observation | visual observation | | | | High Flows |
| 4 | 26 | visual observation | visual observation | visual observation | visual observation | Lifted nets | High Flows |
| 4 | 27 | visual observation | visual observation | | | Lifted nets | High Flows |
| 4 | 28 | | | | | Lifted nets | |
| 4 | 29 | | | | | Lifted nets | |
| 4 | 30 | visual observation | visual observation | | | Lifted nets | High Flows |
| 5 | 1 | visual observation | visual observation | | | Lifted nets | Flows normal, crew sent to walk river sites |
| 5 | 2 | visual observation | visual observation | | | Lifted nets | At sites |
| 5 | 3 | visual observation | visual observation | visual observation | | Lifted nets | |
| 5 | 4 | visual observation | visual observation | visual observation | | Lifted nets | |
| 5 | 5 | | | | | | |
| 5 | 6 | | | | | | |
| 5 | 7 | visual observation | visual observation | visual observation | | | Interviewed anglers |
| 5 | 8 | visual observation | visual observation | visual observation | | | Interviewed anglers* |
| 5 | 9 | visual observation | visual observation | visual observation | | | Interviewed anglers** |
| 5 | 10 | visual observation | visual observation | visual observation | | | |
| 5 | 11 | visual observation | visual observation | visual observation | | | |
| 5 | 12 | | | | | | |
| 5 | 13 | | | | | | |
| 5 | 14 | visual observation | visual observation | visual observation | | | |
| 5 | 15 | visual/telemetry | visual/telemetry | visual/telemetry | visual/telemetry | | Canoed from dam to hwy. 13 |
| 5 | 16 | visual observation | visual observation | visual observation | | | |
| 5 | 17 | visual observation | visual observation | visual observation | | | |
| 5 | 18 | visual/telemetry | visual/telemetry | visual/telemetry | visual/telemetry | | Canoed from dam to Hwy. 13 |
| 5 | 19 | | | | | | |
| 5 | 20 | | | | | | |
| 5 | 21 | | | | gill net | | Set gill net at Hwy. 13 |

Appendix A. Continued.

| Month | Day | By-pass channel | Spawning area | Beaser access | Hwy 13 bridge | Bad/White confluence | Comments |
|---|---|---|---|---|---|---|---|
| 5 | 22 | visual observation | visual observation | visual observation | | | |
| 5 | 23 | visual observation | visual observation | visual observation | | | |
| 5 | 24 | | | | | | |
| 5 | 25 | | | | | | |
| 5 | 26 | | | | gill net | | Set gill net at Hwy. 13 |
| 5 | 27 | | | | | | |
| 5 | 28 | | | | | | |
| 5 | 29 | | | | | | |
| 5 | 30 | | | | larval drift net | | Set larval drift net at Hwy. 13 |
| 5 | 31 | | | | | | |
| 6 | 1 | | | | | | |
| 6 | 2 | | | | | | |
| 6 | 3 | | | | | | |
| 6 | 4 | | | | | | |
| 6 | 5 | | | | larval drift net | | Set larval drift net at Hwy. 13 |
| 6 | 6 | | | | larval drift net | | Set larval drift net at Hwy. 13 |
| 6 | 7 | habitat | | | | | Collected physical habitat characteristics |
| 6 | 8 | habitat | habitat | | | | Collected physical habitat characteristics |
| 6 | 9 | | | | | | |
| 6 | 10 | | | | | | |
| 6 | 11 | | habitat | | | | Collected physical habitat characteristics |
| 6 | 12 | | | | habitat | | Collected physical habitat characteristics |
| 6 | 13 | | | | larval drift net | | Set larval drift net at Hwy. 13 |

* Fisherman showed us a deep hole several bends past the island where a 55" sturgeon was snagged on Monday evening, 5-7-01.
Report of fisherman seeing a sturgeon snagged near the dam on Monday 5-7-01.

** Told by a fishermen that a 40" sturgeon had been snagged in front of the powerhouse on Tuesday, 5-8-01.

Appendix B. Habitat data taken on the White River, Wisconsin, during 20001.

| MONTH | DAY | YEAR | TRANSECT | X | Y | LAT | LONG | WATER DEPTH | SUBSTRATE | VEGETATION | SILT COVERING SUBSTRATE | NOTES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 2001 | 1 | 20 | 100 | 4629.864 | 9054.483 | 0 | 4 | | | |
| 6 | 7 | 2001 | 1 | 20 | 101 | | | 0 | 7 | 1 | | |
| 6 | 7 | 2001 | 1 | 20 | 102 | | | 0 | 5 | 1 | | |
| 6 | 7 | 2001 | 1 | 20 | 103 | | | 0 | 4 | | | |
| 6 | 7 | 2001 | 1 | 20 | 104 | | | 0 | 7 | | | |
| 6 | 7 | 2001 | 1 | 20 | 105 | | | 0 | 4 | 3,1 | | |
| 6 | 7 | 2001 | 1 | 20 | 106 | | | 0 | 7 | | | |
| 6 | 7 | 2001 | 1 | 20 | 107 | | | 0 | 4 | | | |
| 6 | 7 | 2001 | 1 | 20 | 108 | | | 0 | | 3,1 | | |
| 6 | 7 | 2001 | 1 | 20 | 109 | | | 0 | 8 | | | |
| 6 | 7 | 2001 | 1 | 20 | 110 | | | 0 | 8 | | | |
| 6 | 7 | 2001 | 1 | 20 | 111 | | | 0 | 6 | | | |
| 6 | 7 | 2001 | 1 | 20 | 112 | | | 0 | 7 | | | |
| 6 | 7 | 2001 | 1 | 20 | 113 | | | 0 | 4 | | | |
| 6 | 7 | 2001 | 1 | 20 | 114 | | | 0 | 7 | | | |
| 6 | 7 | 2001 | 1 | 20 | 115 | | | 0 | 6 | | | |
| 6 | 7 | 2001 | 1 | 20 | 116 | | | 16 | 4 | | | |
| 6 | 7 | 2001 | 1 | 20 | 117 | | | 23 | 8 | 2 | 1 | |
| 6 | 7 | 2001 | 1 | 20 | 118 | | | 35 | 8 | | 1 | |
| 6 | 7 | 2001 | 1 | 20 | 119 | | | 8 | 8 | 2 | 1 | |
| 6 | 7 | 2001 | 1 | 20 | 120 | | | 3 | 8 | 2 | 1 | |
| 6 | 7 | 2001 | 1 | 20 | 121 | | | 10 | 8 | | 1 | |
| 6 | 7 | 2001 | 1 | 20 | 122 | | | 21 | 8 | | | |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 2001 | 1 | 20 | 123 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 1 | 20 | 124 | | | 12 | 8 | | 1 |
| 6 | 7 | 2001 | 1 | 20 | 125 | | | 21 | 5 | | 1 |
| 6 | 7 | 2001 | 1 | 20 | 126 | | | 20 | 8 | | 1 |
| 6 | 7 | 2001 | 1 | 20 | 127 | | | 25 | 8 | | 1 |
| 6 | 7 | 2001 | 1 | 20 | 128 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 1 | 20 | 129 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 2 | 40 | 100 | 4629.865 | 9054.467 | 0 | 3 | | |
| 6 | 7 | 2001 | 2 | 40 | 101 | | | 18 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 2 | 40 | 102 | | | 21 | 4 | 2 | 1 |
| 6 | 7 | 2001 | 2 | 40 | 103 | | | 31 | 6 | 2 | 1 |
| 6 | 7 | 2001 | 2 | 40 | 105 | | | 24 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 2 | 40 | 106 | | | 26 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 2 | 40 | 107 | | | 19 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 2 | 40 | 108 | | | 50 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 2 | 40 | 109 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 2 | 40 | 110 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 3 | 60 | 111 | 4629.867 | 9054.453 | 0 | 4 | 1 | |
| 6 | 7 | 2001 | 3 | 60 | 112 | | | 0 | 3 | 1 | |
| 6 | 7 | 2001 | 3 | 60 | 113 | | | 0 | 3 | 1 | |
| 6 | 7 | 2001 | 3 | 60 | 114 | | | 0 | 4 | | |
| 6 | 7 | 2001 | 3 | 60 | 115 | | | 10 | | | |
| 6 | 7 | 2001 | 3 | 60 | 116 | | | 13 | 5 | 2 | 1 |
| 6 | 7 | 2001 | 3 | 60 | 117 | | | 1 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 3 | 60 | 118 | | | 26 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 3 | 60 | 119 | | | 9 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 3 | 60 | 120 | | | 17 | 8 | 2 | 1 |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 2001 | 3 | 60 | 121 | | | 28 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 3 | 60 | 122 | | | 26 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 3 | 60 | 123 | | | 46 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 3 | 60 | 124 | | | 32 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 3 | 60 | 125 | | | 14 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 3 | 60 | 126 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 3 | 60 | 127 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 4 | 80 | 128 | 4629.874 | 9054.443 | 0 | 4 | 3 | |
| 6 | 7 | 2001 | 4 | 80 | 129 | | | 0 | 3 | 1 | |
| 6 | 7 | 2001 | 4 | 80 | 100 | | | 0 | 8 | | 1 |
| 6 | 7 | 2001 | 4 | 80 | 101 | | | 17 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 4 | 80 | 102 | | | 38 | 6 | 2 | 1 |
| 6 | 7 | 2001 | 4 | 80 | 103 | | | 38 | 8 | | 1 |
| 6 | 7 | 2001 | 4 | 80 | 104 | | | 49 | 6 | | 1 |
| 6 | 7 | 2001 | 4 | 80 | 105 | | | 39 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 4 | 80 | 106 | | | 16 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 4 | 80 | 107 | | | 9 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 4 | 80 | 108 | | | 4 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 4 | 80 | 109 | | | 13 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 4 | 80 | 110 | | | 2 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 4 | 80 | 111 | | | 20 | 8 | | 1 |
| 6 | 7 | 2001 | 4 | 80 | 112 | | | 7 | 8 | | 1 |
| 6 | 7 | 2001 | 4 | 80 | 113 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 4 | 80 | 114 | | | 29 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 4 | 80 | 115 | | | 12 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 4 | 80 | 116 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 4 | 80 | 117 | | | 0 | 8 | 1 | |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 2001 | 4 | 80 | 118 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 5 | 100 | 119 | 4629.875 | 9054.426 | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 5 | 100 | 120 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 5 | 100 | 121 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 5 | 100 | 122 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 5 | 100 | 123 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 5 | 100 | 124 | | | | | | |
| 6 | 7 | 2001 | 5 | 100 | 125 | | | 25 | 6 | | 1 |
| 6 | 7 | 2001 | 5 | 100 | 126 | | | 26 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 5 | 100 | 127 | | | 36 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 5 | 100 | 128 | | | 37 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 5 | 100 | 129 | | | 65 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 5 | 100 | 100 | | | 36 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 5 | 100 | 101 | | | 2 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 5 | 100 | 102 | | | 11 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 5 | 100 | 103 | | | 12 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 5 | 100 | 104 | | | 36 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 5 | 100 | 105 | | | 10 | 8 | | 1 |
| 6 | 7 | 2001 | 5 | 100 | 106 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 5 | 100 | 107 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 5 | 100 | 108 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 5 | 100 | 109 | | | 3 | 8 | | |
| 6 | 7 | 2001 | 5 | 100 | 110 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 5 | 100 | 111 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 5 | 100 | 112 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 6 | 120 | 113 | 4629.876 | 9054.41 | 0 | 7 | 1 | |
| 6 | 7 | 2001 | 6 | 120 | 114 | | | 0 | 4 | | |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 2001 | 6 | 120 | 115 | | | 0 | 7 | | |
| 6 | 7 | 2001 | 6 | 120 | 116 | | | 0 | | | |
| 6 | 7 | 2001 | 6 | 120 | 117 | | | 19 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 118 | | | 33 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 119 | | | 19 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 120 | | | 10 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 121 | | | 4 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 122 | | | 18 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 123 | | | 9 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 124 | | | 13 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 125 | | | 19 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 126 | | | 20 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 127 | | | 18 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 128 | | | 20 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 129 | | | 18 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 100 | | | 22 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 101 | | | 10 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 102 | | | 14 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 6 | 120 | 103 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 6 | 120 | 104 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 7 | 140 | 105 | 4629.876 | 9054.395 | 0 | 4 | 1 | |
| 6 | 7 | 2001 | 7 | 140 | 106 | | | 0 | 4 | 1 | |
| 6 | 7 | 2001 | 7 | 140 | 107 | | | 0 | 3 | | |
| 6 | 7 | 2001 | 7 | 140 | 108 | | | 24 | 4 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 109 | | | 35 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 110 | | | 51 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 111 | | | 37 | 8 | 2 | 1 |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 2001 | 7 | 140 | 112 | | | 51 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 113 | | | 37 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 114 | | | 29 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 115 | | | 5 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 116 | | | 2 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 117 | | | 21 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 118 | | | 26 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 119 | | | 27 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 120 | | | 50 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 121 | | | 27 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 122 | | | 26 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 123 | | | 8 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 124 | | | 3 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 7 | 140 | 125 | | | 0 | | 3 | |
| 6 | 7 | 2001 | 7 | 140 | 126 | | | 11 | 8 | | |
| 6 | 7 | 2001 | 7 | 140 | 127 | | | 0 | 4 | | |
| 6 | 7 | 2001 | 7 | 140 | 128 | | | 0 | 6 | 1 | |
| 6 | 7 | 2001 | 8 | 160 | 129 | 4629.879 | 9054.383 | 0 | 1 | 1 | |
| 6 | 7 | 2001 | 8 | 160 | 100 | | | 0 | 4 | 1 | |
| 6 | 7 | 2001 | 8 | 160 | 101 | | | 0 | 7 | 2 | |
| 6 | 7 | 2001 | 8 | 160 | 102 | | | 8 | 4 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 103 | | | 11 | 4 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 104 | | | 10 | 6 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 105 | | | 10 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 106 | | | 7 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 107 | | | 1 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 108 | | | 11 | 8 | 2 | 1 |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 2001 | 8 | 160 | 109 | | | 28 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 110 | | | 54 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 111 | | | 40 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 112 | | | 48 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 113 | | | 41 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 114 | | | 45 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 115 | | | 48 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 116 | | | 55 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 117 | | | 33 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 118 | | | 32 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 119 | | | 0 | | 3 | |
| 6 | 7 | 2001 | 8 | 160 | 120 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 8 | 160 | 121 | | | 1 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 122 | | | 3 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 8 | 160 | 123 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 8 | 160 | 124 | | | 0 | | | |
| 6 | 7 | 2001 | 9 | 180 | 125 | 4629.873 | 9054.366 | 0 | 1 | 1 | |
| 6 | 7 | 2001 | 9 | 180 | 126 | | | 0 | 1 | 1 | |
| 6 | 7 | 2001 | 9 | 180 | 127 | | | 0 | 3 | | |
| 6 | 7 | 2001 | 9 | 180 | 128 | | | 23 | 6 | | 1 |
| 6 | 7 | 2001 | 9 | 180 | 129 | | | 18 | 7 | | 1 |
| 6 | 7 | 2001 | 9 | 180 | 100 | | | 20 | 6 | | 1 |
| 6 | 7 | 2001 | 9 | 180 | 101 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 9 | 180 | 102 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 9 | 180 | 103 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 9 | 180 | 104 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 9 | 180 | 105 | | | 0 | | 2 | 1 |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 2001 | 9 | 180 | 106 | | | 12 | 8 | | |
| 6 | 7 | 2001 | 9 | 180 | 107 | | | 28 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 9 | 180 | 108 | | | 55 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 9 | 180 | 109 | | | 38 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 9 | 180 | 110 | | | 8 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 9 | 180 | 111 | | | 4 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 9 | 180 | 112 | | | 3 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 9 | 180 | 113 | | | 7 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 9 | 180 | 114 | | | 0 | | 3 | |
| 6 | 7 | 2001 | 9 | 180 | 115 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 9 | 180 | 116 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 9 | 180 | 117 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 9 | 180 | 118 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 9 | 180 | 119 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 9 | 180 | 120 | | | 0 | | 3 | |
| 6 | 7 | 2001 | 9 | 180 | 121 | | | 0 | 8 | 3 | |
| 6 | 7 | 2001 | 9 | 180 | 122 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 9 | 180 | 123 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 10 | 200 | 124 | 4629.873 | 9054.343 | 0 | 4 | 1 | |
| 6 | 7 | 2001 | 10 | 200 | 125 | | | 0 | 7 | 1 | |
| 6 | 7 | 2001 | 10 | 200 | 126 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 10 | 200 | 127 | | | 0 | 5 | | |
| 6 | 7 | 2001 | 10 | 200 | 128 | | | 0 | 7 | | |
| 6 | 7 | 2001 | 10 | 200 | 129 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 10 | 200 | 100 | | | 0 | 5 | 1 | |
| 6 | 7 | 2001 | 10 | 200 | 101 | | | 0 | 7 | | |
| 6 | 7 | 2001 | 10 | 200 | 102 | | | 0 | 4 | | |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 2001 | 10 | 200 | 103 | | | 0 | 6 | | |
| 6 | 7 | 2001 | 10 | 200 | 104 | | | 0 | 7 | | |
| 6 | 7 | 2001 | 10 | 200 | 105 | | | 0 | | | 1 |
| 6 | 7 | 2001 | 10 | 200 | 106 | | | 15 | 8 | | |
| 6 | 7 | 2001 | 10 | 200 | 107 | | | 26 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 10 | 200 | 108 | | | 25 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 10 | 200 | 109 | | | 27 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 10 | 200 | 110 | | | 46 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 10 | 200 | 111 | | | 89 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 10 | 200 | 112 | | | 42 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 10 | 200 | 113 | | | 44 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 10 | 200 | 114 | | | 45 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 10 | 200 | 115 | | | 25 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 10 | 200 | 116 | | | 25 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 10 | 200 | 117 | | | 25 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 10 | 200 | 118 | | | 4 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 10 | 200 | 119 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 11 | 220 | 120 | 4629.871 | 9054.329 | 0 | 6 | 1 | |
| 6 | 7 | 2001 | 11 | 220 | 121 | | | 0 | 7 | | |
| 6 | 7 | 2001 | 11 | 220 | 122 | | | 0 | 6 | | |
| 6 | 7 | 2001 | 11 | 220 | 123 | | | 10 | 6 | 2 | 1 |
| 6 | 7 | 2001 | 11 | 220 | 124 | | | 12 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 11 | 220 | 125 | | | 21 | 7 | 2 | 1 |
| 6 | 7 | 2001 | 11 | 220 | 126 | | | 21 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 11 | 220 | 127 | | | 27 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 11 | 220 | 128 | | | 14 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 11 | 220 | 129 | | | 13 | 8 | 2 | 1 |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 2001 | 11 | 220 | 100 | | | 38 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 11 | 220 | 101 | | | 40 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 11 | 220 | 102 | | | 30 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 11 | 220 | 103 | | | 24 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 11 | 220 | 104 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 11 | 220 | 105 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 11 | 220 | 106 | | | 9 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 11 | 220 | 107 | | | 17 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 11 | 220 | 108 | | | 36 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 11 | 220 | 109 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 11 | 220 | 110 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 12 | 240 | 111 | 4629.867 | 9054.317 | 0 | 1 | 1 | |
| 6 | 7 | 2001 | 12 | 240 | 112 | | | 0 | 1 | 1 | |
| 6 | 7 | 2001 | 12 | 240 | 113 | | | 0 | 4 | | |
| 6 | 7 | 2001 | 12 | 240 | 114 | | | 21 | 6 | | 1 |
| 6 | 7 | 2001 | 12 | 240 | 115 | | | 49 | 5 | 2 | 1 |
| 6 | 7 | 2001 | 12 | 240 | 116 | | | 71 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 12 | 240 | 117 | | | 25 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 12 | 240 | 118 | | | 10 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 12 | 240 | 119 | | | 6 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 12 | 240 | 120 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 12 | 240 | 121 | | | 0 | | | |
| 6 | 7 | 2001 | 12 | 240 | 122 | | | 7 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 12 | 240 | 123 | | | 28 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 12 | 240 | 124 | | | 5 | 8 | | |
| 6 | 7 | 2001 | 12 | 240 | 125 | | | 1 | 8 | | 1 |
| 6 | 7 | 2001 | 12 | 240 | 126 | | | 0 | 8 | | |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 2001 | 12 | 240 | 127 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 12 | 240 | 128 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 12 | 240 | 129 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 12 | 240 | 100 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 12 | 240 | 101 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 12 | 240 | 102 | | | 26 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 12 | 240 | 103 | | | 32 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 12 | 240 | 104 | | | 5 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 12 | 240 | 105 | | | 13 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 12 | 240 | 106 | | | 26 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 12 | 240 | 107 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 12 | 240 | 108 | | | 0 | 4 | | |
| 6 | 7 | 2001 | 12 | 240 | 109 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 12 | 240 | 110 | | | 0 | 1 | 1 | |
| 6 | 7 | 2001 | 13 | 260 | 111 | 4629.877 | 9054.304 | 0 | 1 | 1 | |
| 6 | 7 | 2001 | 13 | 260 | 112 | | | 0 | 3 | 1 | |
| 6 | 7 | 2001 | 13 | 260 | 113 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 13 | 260 | 114 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 13 | 260 | 115 | | | 0 | 4 | | |
| 6 | 7 | 2001 | 13 | 260 | 116 | | | 0 | 5 | | |
| 6 | 7 | 2001 | 13 | 260 | 117 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 13 | 260 | 118 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 13 | 260 | 119 | | | 0 | | | |
| 6 | 7 | 2001 | 13 | 260 | 120 | | | 5 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 121 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 13 | 260 | 122 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 13 | 260 | 123 | | | 0 | 8 | | |

Appendix B. Continued.

| | | | | | | | | | | | |
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| 6 | 7 | 2001 | 13 | 260 | 125 | | | 3 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 126 | | | 5 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 127 | | | 18 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 128 | | | 18 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 129 | | | 29 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 100 | | | 9 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 101 | | | 17 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 102 | | | 18 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 103 | | | 10 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 104 | | | 14 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 105 | | | 15 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 106 | | | 38 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 107 | | | 17 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 108 | | | 12 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 109 | | | 8 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 13 | 260 | 110 | | | 0 | 3 | 1 | |
| 6 | 7 | 2001 | 13 | 260 | 111 | | | 0 | 1 | 1 | |
| 6 | 7 | 2001 | 13 | 260 | 112 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 13 | 260 | 113 | | | 0 | 7 | 1 | |
| 6 | 7 | 2001 | 13 | 260 | 114 | | | 0 | 5 | 1 | |
| 6 | 7 | 2001 | 14 | 280 | 115 | 4629.873 | 9054.296 | 0 | 4 | 3 | |
| 6 | 7 | 2001 | 14 | 280 | 116 | | | 0 | 4 | 1 | |
| 6 | 7 | 2001 | 14 | 280 | 117 | | | 0 | 6 | | |
| 6 | 7 | 2001 | 14 | 280 | 118 | | | 0 | 5 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 119 | | | 13 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 120 | | | 19 | 8 | 2 | 1 |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
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| 6 | 7 | 2001 | 14 | 280 | 123 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 14 | 280 | 124 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 14 | 280 | 125 | | | 0 | | | |
| 6 | 7 | 2001 | 14 | 280 | 126 | | | 32 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 127 | | | 68 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 128 | | | 27 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 129 | | | 11 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 100 | | | 3 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 101 | | | 17 | 8 | 1 | |
| 6 | 7 | 2001 | 14 | 280 | 102 | | | 28 | 8 | 1 | |
| 6 | 7 | 2001 | 14 | 280 | 103 | | | 31 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 104 | | | 34 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 105 | | | 34 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 106 | | | 34 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 107 | | | 22 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 108 | | | 21 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 109 | | | 34 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 14 | 280 | 110 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 14 | 280 | 111 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 15 | 300 | 112 | 4629.875 | 9054.273 | 0 | 5 | 1 | |
| 6 | 7 | 2001 | 15 | 300 | 113 | | | 0 | | 1,3 | |
| 6 | 7 | 2001 | 15 | 300 | 114 | | | 0 | 4 | | |
| 6 | 7 | 2001 | 15 | 300 | 115 | | | 0 | | | |
| 6 | 7 | 2001 | 15 | 300 | 116 | | | 5 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 15 | 300 | 117 | | | 26 | 8 | 2 | 1 |

Appendix B. Continued.

| | | | | | | | | | | | |
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| 6 | 7 | 2001 | 15 | 300 | 118 | | | 36 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 15 | 300 | 119 | | | 40 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 15 | 300 | 120 | | | 47 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 15 | 300 | 121 | | | 36 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 15 | 300 | 122 | | | 41 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 15 | 300 | 123 | | | 1 | 8 | | 1 |
| 6 | 7 | 2001 | 15 | 300 | 124 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 15 | 300 | 125 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 15 | 300 | 126 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 15 | 300 | 127 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 15 | 300 | 128 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 15 | 300 | 129 | | | 0 | | | |
| 6 | 7 | 2001 | 15 | 300 | 100 | | | 17 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 15 | 300 | 101 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 15 | 300 | 102 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 15 | 300 | 103 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 15 | 300 | 104 | | | 0 | 8 | 3 | |
| 6 | 7 | 2001 | 15 | 300 | 105 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 15 | 300 | 106 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 15 | 300 | 107 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 15 | 300 | 108 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 15 | 300 | 109 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 16 | 320 | 110 | 4629.883 | 9054.248 | 0 | 4 | 1 | 1 |
| 6 | 7 | 2001 | 16 | 320 | 111 | | | 0 | | 3 | |
| 6 | 7 | 2001 | 16 | 320 | 112 | | | 0 | 5 | | |
| 6 | 7 | 2001 | 16 | 320 | 113 | | | 0 | 6 | | |
| 6 | 7 | 2001 | 16 | 320 | 114 | | | 0 | 5 | | 1 |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 2001 | 16 | 320 | 115 | | | 24 | 5 | 2 | 1 |
| 6 | 7 | 2001 | 16 | 320 | 116 | | | 42 | 8 | | 1 |
| 6 | 7 | 2001 | 16 | 320 | 117 | | | 44 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 16 | 320 | 118 | | | 46 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 16 | 320 | 119 | | | 54 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 16 | 320 | 120 | | | 34 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 16 | 320 | 121 | | | 0 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 16 | 320 | 122 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 16 | 320 | 123 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 16 | 320 | 124 | | | 0 | 8 | | 1 |
| 6 | 7 | 2001 | 16 | 320 | 125 | | | 13 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 16 | 320 | 126 | | | 31 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 16 | 320 | 127 | | | 26 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 16 | 320 | 128 | | | 17 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 16 | 320 | 129 | | | 48 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 16 | 320 | 100 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 16 | 320 | 101 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 16 | 320 | 102 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 16 | 320 | 103 | | | 3 | 8 | | 1 |
| 6 | 7 | 2001 | 16 | 320 | 104 | | | 0 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 16 | 320 | 105 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 16 | 320 | 106 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 17 | 340 | 107 | 4629.885 | 9054.246 | 0 | 6 | 1 | |
| 6 | 7 | 2001 | 17 | 340 | 108 | | | 0 | 5 | | |
| 6 | 7 | 2001 | 17 | 340 | 109 | | | 0 | | | |
| 6 | 7 | 2001 | 17 | 340 | 110 | | | 16 | 7 | 2 | 1 |
| 6 | 7 | 2001 | 17 | 340 | 111 | | | 39 | 6 | 2 | 1 |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 2001 | 17 | 340 | 112 | | | 30 | 4 | | 1 |
| 6 | 7 | 2001 | 17 | 340 | 113 | | | 13 | 6 | | 1 |
| 6 | 7 | 2001 | 17 | 340 | 114 | | | 30 | 5 | | 1 |
| 6 | 7 | 2001 | 17 | 340 | 115 | | | 41 | 6 | | 1 |
| 6 | 7 | 2001 | 17 | 340 | 116 | | | 29 | 7 | | 1 |
| 6 | 7 | 2001 | 17 | 340 | 117 | | | 70 | 5 | | 1 |
| 6 | 7 | 2001 | 17 | 340 | 118 | | | 61 | 8 | | 1 |
| 6 | 7 | 2001 | 17 | 340 | 119 | | | 29 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 17 | 340 | 120 | | | 7 | 8 | | 1 |
| 6 | 7 | 2001 | 17 | 340 | 121 | | | 0 | 1,3 | 1 | |
| 6 | 7 | 2001 | 17 | 340 | 122 | | | 0 | 3,8 | 1 | |
| 6 | 7 | 2001 | 17 | 340 | 123 | | | 0 | 1 | 1 | |
| 6 | 7 | 2001 | 17 | 340 | 124 | | | 0 | 8 | | 1 |
| 6 | 7 | 2001 | 17 | 340 | 125 | | | 26 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 17 | 340 | 126 | | | 53 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 17 | 340 | 127 | | | 43 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 17 | 340 | 128 | | | 0 | 1 | 1 | |
| 6 | 7 | 2001 | 17 | 340 | 129 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 17 | 340 | 100 | | | 0 | 8 | 1 | |
| 6 | 7 | 2001 | 17 | 340 | 101 | | | 0 | 8 | | 1 |
| 6 | 7 | 2001 | 17 | 340 | 102 | | | 4 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 17 | 340 | 103 | | | 11 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 17 | 340 | 104 | | | 15 | 8 | 2 | 1 |
| 6 | 7 | 2001 | 17 | 340 | 105 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 17 | 340 | 106 | | | 0 | 8 | | |
| 6 | 7 | 2001 | 18 | 360 | 107 | 4629.897 | 9054.238 | 4 | 1 | 1 | |
| 6 | 7 | 2001 | 18 | 360 | 108 | | | 20 | 4 | | 1 |

Appendix B. Continued.

| | | | | | | | | | | | | |
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| 6 | 7 | 2001 | 18 | 360 | 109 | | | 22 | 4 | | 1 | |
| 6 | 7 | 2001 | 18 | 360 | 110 | | | 21 | 5 | | 1 | |
| 6 | 7 | 2001 | 18 | 360 | 111 | | | 17 | 5 | | 1 | |
| 6 | 7 | 2001 | 18 | 360 | 112 | | | 20 | 6 | | 1 | |
| 6 | 7 | 2001 | 18 | 360 | 113 | | | 24 | 4 | | 1 | |
| 6 | 7 | 2001 | 18 | 360 | 114 | | | 30 | 5 | | 1 | |
| 6 | 7 | 2001 | 18 | 360 | 115 | | | 51 | 5 | | 1 | |
| 6 | 7 | 2001 | 18 | 360 | 116 | | | 69 | 8 | | 1 | |
| 6 | 7 | 2001 | 18 | 360 | 117 | | | 77 | 5 | | 1 | |
| 6 | 7 | 2001 | 18 | 360 | 118 | | | 75 | 8 | | 1 | |
| 6 | 7 | 2001 | 18 | 360 | 119 | | | 75 | 8 | | 1 | |
| 6 | 7 | 2001 | 18 | 360 | 120 | | | 83 | 8 | | 1 | |
| 6 | 7 | 2001 | 18 | 360 | 121 | | | 65 | 8 | | | |
| 6 | 7 | 2001 | 18 | 360 | 122 | | | 67 | 8 | | | |
| 6 | 7 | 2001 | 18 | 360 | 123 | | | 62 | 8 | | | |
| 6 | 7 | 2001 | 18 | 360 | 124 | | | 46 | 8 | | | |
| 6 | 7 | 2001 | 18 | 360 | 125 | | | 47 | 8 | | | |
| 6 | 7 | 2001 | 18 | 360 | 126 | | | 48 | 8 | | | |
| 6 | 7 | 2001 | 18 | 360 | 127 | | | 82 | 8 | | | |
| 6 | 7 | 2001 | 18 | 360 | 128 | | | 0 | 8 | 1 | | |
| 6 | 7 | 2001 | 18 | 360 | 129 | | | 0 | 8 | | | |
| 6 | 7 | 2001 | 18 | 360 | 100 | | | 0 | 8 | | | |
| 6 | 8 | 2001 | 19 | 380 | 101 | 4629.899 | 9054.227 | 259.08 | 0 | | | Too deep to sample |
| 6 | 8 | 2001 | 19 | 380 | 102 | | | 259.08 | 0 | | | |
| 6 | 8 | 2001 | 19 | 380 | 103 | | | 35 | 8 | 2 | | |
| 6 | 8 | 2001 | 19 | 380 | 104 | | | 37 | 8 | 2 | | |
| 6 | 8 | 2001 | 19 | 380 | 105 | | | 44 | 6 | 2 | | |

Appendix B. Continued.

| | | | | | | | | | | | |
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| 6 | 8 | 2001 | 19 | 380 | 106 | | | 34 | 6 | | |
| 6 | 8 | 2001 | 19 | 380 | 107 | | | 25 | 4 | | |
| 6 | 8 | 2001 | 19 | 380 | 108 | | | 20 | 5 | | |
| 6 | 8 | 2001 | 19 | 380 | 109 | | | 23 | 4 | | |
| 6 | 8 | 2001 | 19 | 380 | 110 | | | 29 | 4 | | |
| 6 | 8 | 2001 | 19 | 380 | 111 | | | 52 | 7 | | |
| 6 | 8 | 2001 | 19 | 380 | 112 | | | 66 | 4 | | |
| 6 | 8 | 2001 | 19 | 380 | 113 | | | 68 | 4 | | |
| 6 | 8 | 2001 | 19 | 380 | 114 | | | 59 | 4 | | |
| 6 | 8 | 2001 | 19 | 380 | 115 | | | 66 | 7 | | |
| 6 | 8 | 2001 | 19 | 380 | 116 | | | 69 | 5 | | |
| 6 | 8 | 2001 | 19 | 380 | 117 | | | 65 | 7 | | |
| 6 | 8 | 2001 | 19 | 380 | 118 | | | 65 | 8 | | |
| 6 | 8 | 2001 | 19 | 380 | 119 | | | 51 | 7 | | |
| 6 | 8 | 2001 | 19 | 380 | 120 | | | 50 | 8 | | |
| 6 | 8 | 2001 | 19 | 380 | 121 | | | 42 | 8 | 2 | |
| 6 | 8 | 2001 | 19 | 380 | 122 | | | 27 | 8 | 2 | |
| 6 | 8 | 2001 | 19 | 380 | 123 | | | 35 | 8 | 2 | |
| 6 | 8 | 2001 | 19 | 380 | 124 | | | 37 | 8 | 2 | |
| 6 | 8 | 2001 | 19 | 380 | 125 | | | 0 | 8 | | |
| 6 | 8 | 2001 | 19 | 380 | 126 | | | 0 | 8 | | |
| 6 | 8 | 2001 | 20 | 400 | 102 | 4629.906 | 9054.211 | 0 | 8 | 1 | 1 |
| 6 | 8 | 2001 | 20 | 400 | 103 | | | 0 | 1 | 1 | |
| 6 | 8 | 2001 | 20 | 400 | 104 | | | 0 | 1 | 1 | |
| 6 | 8 | 2001 | 20 | 400 | 105 | | | 0 | 1 | 1 | |
| 6 | 8 | 2001 | 20 | 400 | 106 | | | 0 | 1 | 1 | |
| 6 | 8 | 2001 | 20 | 400 | 107 | | | 0 | 1 | 1 | |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
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| 6 | 8 | 2001 | 20 | 400 | 109 | | | 42 | 8 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 110 | | | 50 | 5 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 111 | | | 45 | 6 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 112 | | | 27 | 7 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 113 | | | 37 | 7 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 114 | | | 41 | 6 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 115 | | | 49 | 4 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 116 | | | 54 | 6 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 117 | | | 47 | 4 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 118 | | | 36 | 7 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 119 | | | 19 | 7 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 120 | | | 40 | 5 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 121 | | | 40 | 5 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 122 | | | 56 | 4 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 123 | | | 71 | 8 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 124 | | | 73 | 8 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 125 | | | 84 | 6 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 126 | | | 98 | 8 | 2 | |
| 6 | 8 | 2001 | 20 | 400 | 127 | | | 133 | 8 | | |
| 6 | 8 | 2001 | 20 | 400 | 128 | | | 100 | 8 | 2 | Too deep to sample |
| 6 | 8 | 2001 | 21 | 420 | 129 | 4629.906 | 9054.196 | 0 | 0 | 1 | |
| 6 | 8 | 2001 | 21 | 420 | 100 | | | 0 | 0 | 1 | |
| 6 | 8 | 2001 | 21 | 420 | 101 | | | 0 | 0 | 1 | |
| 6 | 8 | 2001 | 21 | 420 | 102 | | | 0 | 0 | 1 | |
| 6 | 8 | 2001 | 21 | 420 | 103 | | | 0 | 0 | 1 | |
| 6 | 8 | 2001 | 21 | 420 | 104 | | | 0 | 0 | | |

Appendix B. Continued.

| | | | | | | | | | | | |
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| 6 | 8 | 2001 | 21 | 420 | 106 | | | 63 | 4 | | |
| 6 | 8 | 2001 | 21 | 420 | 107 | | | 47 | 7 | 2 | |
| 6 | 8 | 2001 | 21 | 420 | 108 | | | 70 | 8 | 2 | |
| 6 | 8 | 2001 | 21 | 420 | 109 | | | 75 | 7 | 2 | |
| 6 | 8 | 2001 | 21 | 420 | 110 | | | 69 | 6 | 2 | |
| 6 | 8 | 2001 | 21 | 420 | 111 | | | 53 | 8 | 2 | |
| 6 | 8 | 2001 | 21 | 420 | 112 | | | 60 | 4 | 2 | |
| 6 | 8 | 2001 | 21 | 420 | 113 | | | 73 | 4 | 2 | |
| 6 | 8 | 2001 | 21 | 420 | 114 | | | 118 | 8 | 2 | Too deep to sample |
| 6 | 8 | 2001 | 22 | 440 | 115 | 4629.92 | 9054.183 | 0 | 0 | 1 | |
| 6 | 8 | 2001 | 22 | 440 | 116 | | | 0 | 0 | 1 | |
| 6 | 8 | 2001 | 22 | 440 | 117 | | | 0 | 0 | 1 | |
| 6 | 8 | 2001 | 22 | 440 | 118 | | | 0 | 0 | 1 | |
| 6 | 8 | 2001 | 22 | 440 | 119 | | | 0 | 1 | | |
| 6 | 8 | 2001 | 22 | 440 | 120 | | | 34 | 3 | | |
| 6 | 8 | 2001 | 22 | 440 | 121 | | | 31 | 4 | | |
| 6 | 8 | 2001 | 22 | 440 | 122 | | | 37 | 6 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 123 | | | 43 | 3 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 124 | | | 46 | 3 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 125 | | | 45 | 6 | | |
| 6 | 8 | 2001 | 22 | 440 | 126 | | | 57 | 4 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 127 | | | 58 | 8 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 128 | | | 49 | 8 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 129 | | | 45 | 8 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 100 | | | 49 | 8 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 101 | | | 68 | 6 | | |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
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| 6 | 8 | 2001 | 22 | 440 | 103 | | | 65 | 6 | | |
| 6 | 8 | 2001 | 22 | 440 | 104 | | | 66 | 7 | | |
| 6 | 8 | 2001 | 22 | 440 | 105 | | | 69 | 6 | | |
| 6 | 8 | 2001 | 22 | 440 | 106 | | | 35 | 8 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 107 | | | 43 | 8 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 108 | | | 62 | 6 | | |
| 6 | 8 | 2001 | 22 | 440 | 109 | | | 62 | 5 | | |
| 6 | 8 | 2001 | 22 | 440 | 110 | | | 63 | 5 | | |
| 6 | 8 | 2001 | 22 | 440 | 111 | | | 33 | 8 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 112 | | | 41 | 8 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 113 | | | 32 | 8 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 114 | | | 43 | 7 | 2 | |
| 6 | 8 | 2001 | 22 | 440 | 115 | | | 65 | 4 | | |
| 6 | 8 | 2001 | 22 | 440 | 116 | | | 55 | 5 | | |
| 6 | 8 | 2001 | 22 | 440 | 117 | | | 31 | 4 | | |
| 6 | 8 | 2001 | 22 | 440 | 118 | | | 0 | 0 | 1 | |
| 6 | 8 | 2001 | 22 | 440 | 119 | | | 0 | 0 | 1 | |
| 6 | 12 | 2001 | 23 | 460 | 120 | 4629.924 | 9054.166 | 0 | 0 | 1 | |
| 6 | 12 | 2001 | 23 | 460 | 121 | | | 0 | | 3,1 | |
| 6 | 12 | 2001 | 23 | 460 | 122 | | | 0 | 0 | 1 | |
| 6 | 12 | 2001 | 23 | 460 | 123 | | | 11 | 0 | | |
| 6 | 12 | 2001 | 23 | 460 | 124 | | | 15 | | 3 | |
| 6 | 12 | 2001 | 23 | 460 | 125 | | | 29 | 4 | | 1 |
| 6 | 12 | 2001 | 23 | 460 | 126 | | | 28 | 4 | 3 | |
| 6 | 12 | 2001 | 23 | 460 | 127 | | | 23 | 6 | | |
| 6 | 12 | 2001 | 23 | 460 | 128 | | | 34 | 7 | 2 | |

Appendix B. Continued.

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| 6 | 12 | 2001 | 23 | 460 | 129 | 38 | 7 | |
| 6 | 12 | 2001 | 23 | 460 | 100 | 38 | 5 | |
| 6 | 12 | 2001 | 23 | 460 | 101 | 39 | 5 | |
| 6 | 12 | 2001 | 23 | 460 | 102 | 42 | 6 | 2 |
| 6 | 12 | 2001 | 23 | 460 | 103 | 42 | 6 | 2 |
| 6 | 12 | 2001 | 23 | 460 | 104 | 45 | 6 | 2 |
| 6 | 12 | 2001 | 23 | 460 | 105 | 32 | 7 | 2 |
| 6 | 12 | 2001 | 23 | 460 | 106 | 32 | 5 | |
| 6 | 12 | 2001 | 23 | 460 | 107 | 29 | 7 | 2 |
| 6 | 12 | 2001 | 23 | 460 | 108 | 36 | 6 | |
| 6 | 12 | 2001 | 23 | 460 | 109 | 39 | 7 | |
| 6 | 12 | 2001 | 23 | 460 | 110 | 28 | 8 | |
| 6 | 12 | 2001 | 23 | 460 | 111 | 27 | 8 | 2 |
| 6 | 12 | 2001 | 23 | 460 | 112 | 58 | 8 | |
| 6 | 12 | 2001 | 23 | 460 | 113 | 19 | 8 | 2 |
| 6 | 12 | 2001 | 23 | 460 | 114 | 55 | 8 | |
| 6 | 12 | 2001 | 23 | 460 | 115 | 45 | 6 | |
| 6 | 12 | 2001 | 23 | 460 | 116 | 40 | 8 | 2 |
| 6 | 12 | 2001 | 23 | 460 | 117 | 41 | 8 | |
| 6 | 12 | 2001 | 23 | 460 | 118 | 41 | 5 | |
| 6 | 12 | 2001 | 23 | 460 | 119 | 47 | 6 | |
| 6 | 12 | 2001 | 23 | 460 | 120 | 44 | 8 | 2 |
| 6 | 12 | 2001 | 23 | 460 | 121 | 52 | 6 | |
| 6 | 12 | 2001 | 23 | 460 | 122 | 40 | 6 | |
| 6 | 12 | 2001 | 23 | 460 | 123 | 41 | 5 | 2 |
| 6 | 12 | 2001 | 23 | 460 | 124 | 35 | 3 | |
| 6 | 12 | 2001 | 23 | 460 | 125 | 14 | 4 | |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
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| 6 | 12 | 2001 | 23 | 460 | 127 | | | 0 | 0 | 1 | |
| 6 | 12 | 2001 | 24 | 480 | 128 | 4629.928 | 9054.15 | 0 | 8 | 1 | |
| 6 | 12 | 2001 | 24 | 480 | 129 | | | 0 | 0 | 1 | |
| 6 | 12 | 2001 | 24 | 480 | 100 | | | 0 | 8 | | 1 |
| 6 | 12 | 2001 | 24 | 480 | 101 | | | 26 | 3 | | |
| 6 | 12 | 2001 | 24 | 480 | 102 | | | 29 | 4 | 2 | |
| 6 | 12 | 2001 | 24 | 480 | 103 | | | 35 | 4 | 2 | |
| 6 | 12 | 2001 | 24 | 480 | 104 | | | 34 | 5 | | |
| 6 | 12 | 2001 | 24 | 480 | 105 | | | 42 | 7 | | |
| 6 | 12 | 2001 | 24 | 480 | 106 | | | 31 | 8 | 2 | |
| 6 | 12 | 2001 | 24 | 480 | 107 | | | 50 | 8 | 2 | |
| 6 | 12 | 2001 | 24 | 480 | 108 | | | 53 | 8 | 2 | |
| 6 | 12 | 2001 | 24 | 480 | 109 | | | 29 | 8 | 2 | |
| 6 | 12 | 2001 | 24 | 480 | 110 | | | 45 | 7 | | |
| 6 | 12 | 2001 | 24 | 480 | 111 | | | 27 | 8 | | |
| 6 | 12 | 2001 | 24 | 480 | 112 | | | 29 | 8 | 2 | |
| 6 | 12 | 2001 | 24 | 480 | 113 | | | 43 | 5 | 2 | |
| 6 | 12 | 2001 | 24 | 480 | 114 | | | 47 | 5 | 2 | |
| 6 | 12 | 2001 | 24 | 480 | 115 | | | 39 | 5 | 2 | |
| 6 | 12 | 2001 | 24 | 480 | 116 | | | 24 | 8 | 2 | |
| 6 | 12 | 2001 | 24 | 480 | 117 | | | 49 | 8 | | |
| 6 | 12 | 2001 | 24 | 480 | 118 | | | 58 | 6 | | |
| 6 | 12 | 2001 | 24 | 480 | 119 | | | 52 | 6 | 2 | |
| 6 | 12 | 2001 | 24 | 480 | 120 | | | 38 | 6 | | |
| 6 | 12 | 2001 | 24 | 480 | 121 | | | 31 | 6 | | |
| 6 | 12 | 2001 | 24 | 480 | 122 | | | 31 | 6 | 2 | |

Appendix B. Continued.

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|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 24 | 480 | 123 | | | 27 | 4 | 2 |
| 6 | 12 | 2001 | 24 | 480 | 124 | | | 18 | 7 | 2 |
| 6 | 12 | 2001 | 24 | 480 | 125 | | | 29 | 6 | |
| 6 | 12 | 2001 | 24 | 480 | 126 | | | 30 | 4 | |
| 6 | 12 | 2001 | 24 | 480 | 127 | | | 37 | 4 | |
| 6 | 12 | 2001 | 24 | 480 | 128 | | | 28 | 4 | |
| 6 | 12 | 2001 | 24 | 480 | 129 | | | 0 | 4 | 1 |
| 6 | 12 | 2001 | 24 | 480 | 100 | | | 0 | 0 | 1 |
| 6 | 12 | 2001 | 25 | 500 | 101 | 4629.922 | 9054.142 | 0 | 0 | 1 |
| 6 | 12 | 2001 | 25 | 500 | 102 | | | 0 | 0 | 1 |
| 6 | 12 | 2001 | 25 | 500 | 103 | | | 0 | 5 | 3 |
| 6 | 12 | 2001 | 25 | 500 | 104 | | | 27 | 4 | |
| 6 | 12 | 2001 | 25 | 500 | 105 | | | 23 | 6 | 2 |
| 6 | 12 | 2001 | 25 | 500 | 106 | | | 23 | 6 | 2 |
| 6 | 12 | 2001 | 25 | 500 | 107 | | | 15 | 6 | 2 |
| 6 | 12 | 2001 | 25 | 500 | 108 | | | 44 | 8 | 2 |
| 6 | 12 | 2001 | 25 | 500 | 109 | | | 43 | 7 | |
| 6 | 12 | 2001 | 25 | 500 | 110 | | | 60 | 6 | |
| 6 | 12 | 2001 | 25 | 500 | 111 | | | 63 | 6 | |
| 6 | 12 | 2001 | 25 | 500 | 112 | | | 57 | 6 | |
| 6 | 12 | 2001 | 25 | 500 | 113 | | | 57 | 6 | |
| 6 | 12 | 2001 | 25 | 500 | 114 | | | 39 | 8 | 2 |
| 6 | 12 | 2001 | 25 | 500 | 115 | | | 49 | 8 | 2 |
| 6 | 12 | 2001 | 25 | 500 | 116 | | | 52 | 7 | |
| 6 | 12 | 2001 | 25 | 500 | 117 | | | 47 | 5 | |
| 6 | 12 | 2001 | 25 | 500 | 118 | | | 47 | 6 | 2 |
| 6 | 12 | 2001 | 25 | 500 | 119 | | | 41 | 4 | 2 |

Appendix B. Continued.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 25 | 500 | 120 | | | 27 | 6 | 2 |
| 6 | 12 | 2001 | 25 | 500 | 121 | | | 22 | 6 | 2 |
| 6 | 12 | 2001 | 25 | 500 | 122 | | | 14 | 6 | 2 |
| 6 | 12 | 2001 | 25 | 500 | 123 | | | 20 | 6 | 2 |
| 6 | 12 | 2001 | 25 | 500 | 124 | | | 24 | 8 | 2 |
| 6 | 12 | 2001 | 25 | 500 | 125 | | | 32 | 6 | 2 |
| 6 | 12 | 2001 | 25 | 500 | 126 | | | 40 | 4 | |
| 6 | 12 | 2001 | 25 | 500 | 127 | | | 25 | 6 | |
| 6 | 12 | 2001 | 25 | 500 | 128 | | | 24 | 4 | |
| 6 | 12 | 2001 | 25 | 500 | 129 | | | 7 | 6 | |
| 6 | 12 | 2001 | 25 | 500 | 100 | | | 0 | 0 | 1 |
| 6 | 12 | 2001 | 25 | 500 | 101 | | | 0 | 7 | 1 |
| 6 | 12 | 2001 | 26 | 520 | 102 | 4629.916 | 9054.126 | 0 | 0 | 1 |
| 6 | 12 | 2001 | 26 | 520 | 103 | | | 0 | 0 | 1 |
| 6 | 12 | 2001 | 26 | 520 | 104 | | | 0 | 4 | 1 |
| 6 | 12 | 2001 | 26 | 520 | 105 | | | 0 | | |
| 6 | 12 | 2001 | 26 | 520 | 106 | | | 23 | 6 | |
| 6 | 12 | 2001 | 26 | 520 | 107 | | | 34 | 6 | 1 |
| 6 | 12 | 2001 | 26 | 520 | 108 | | | 38 | 5 | |
| 6 | 12 | 2001 | 26 | 520 | 109 | | | 51 | 4 | |
| 6 | 12 | 2001 | 26 | 520 | 110 | | | 68 | 6 | |
| 6 | 12 | 2001 | 26 | 520 | 111 | | | 60 | 6 | |
| 6 | 12 | 2001 | 26 | 520 | 112 | | | 59 | 5 | 2 |
| 6 | 12 | 2001 | 26 | 520 | 113 | | | 57 | 4 | 2 |
| 6 | 12 | 2001 | 26 | 520 | 114 | | | 49 | 7 | |
| 6 | 12 | 2001 | 26 | 520 | 115 | | | 45 | 8 | 2 |
| 6 | 12 | 2001 | 26 | 520 | 116 | | | 48 | 6 | 2 |

Appendix B. Continued.

| | | | | | | | | | | |
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| 6 | 12 | 2001 | 26 | 520 | 118 | | | 48 | 8 | 2 |
| 6 | 12 | 2001 | 26 | 520 | 119 | | | 43 | 6 | 2 |
| 6 | 12 | 2001 | 26 | 520 | 120 | | | 43 | 6 | 2 |
| 6 | 12 | 2001 | 26 | 520 | 121 | | | 44 | 6 | 2 |
| 6 | 12 | 2001 | 26 | 520 | 122 | | | 42 | 4 | 2 |
| 6 | 12 | 2001 | 26 | 520 | 123 | | | 35 | 6 | 2 |
| 6 | 12 | 2001 | 26 | 520 | 124 | | | 33 | 4 | 2 |
| 6 | 12 | 2001 | 26 | 520 | 125 | | | 30 | 6 | 2 |
| 6 | 12 | 2001 | 26 | 520 | 126 | | | 32 | 4 | 2 |
| 6 | 12 | 2001 | 26 | 520 | 127 | | | 37 | 3 | 2 |
| 6 | 12 | 2001 | 26 | 520 | 128 | | | 37 | 4 | |
| 6 | 12 | 2001 | 26 | 520 | 129 | | | 25 | 5 | |
| 6 | 12 | 2001 | 26 | 520 | 100 | | | 13 | 4 | |
| 6 | 12 | 2001 | 26 | 520 | 101 | | | 4 | 4 | |
| 6 | 12 | 2001 | 26 | 520 | 102 | | | 0 | 5 | |
| 6 | 12 | 2001 | 26 | 520 | 103 | | | 0 | 0 | 1 |
| 6 | 12 | 2001 | 27 | 540 | 104 | 4629.923 | 9054.102 | 0 | 0 | 1 |
| 6 | 12 | 2001 | 27 | 540 | 105 | | | 0 | | 3 |
| 6 | 12 | 2001 | 27 | 540 | 106 | | | 0 | | |
| 6 | 12 | 2001 | 27 | 540 | 107 | | | 16 | 3 | |
| 6 | 12 | 2001 | 27 | 540 | 108 | | | 21 | 3 | |
| 6 | 12 | 2001 | 27 | 540 | 109 | | | 29 | 4 | |
| 6 | 12 | 2001 | 27 | 540 | 110 | | | 47 | 6 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 111 | | | 68 | 6 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 112 | | | 54 | 8 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 113 | | | 81 | 8 | 2 |

Appendix B. Continued.

| | | | | | | | | | | |
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| 6 | 12 | 2001 | 27 | 540 | 115 | | | 53 | 7 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 116 | | | 52 | 5 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 117 | | | 45 | 4 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 118 | | | 39 | 6 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 119 | | | 47 | 4 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 120 | | | 48 | 6 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 121 | | | 60 | 5 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 122 | | | 60 | 6 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 123 | | | 56 | 6 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 124 | | | 57 | 7 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 125 | | | 59 | 7 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 126 | | | 50 | 6 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 127 | | | 50 | 4 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 128 | | | 52 | 5 | 2 |
| 6 | 12 | 2001 | 27 | 540 | 129 | | | 38 | 6 | |
| 6 | 12 | 2001 | 27 | 540 | 100 | | | 27 | 4 | |
| 6 | 12 | 2001 | 27 | 540 | 101 | | | 12 | 4 | |
| 6 | 12 | 2001 | 27 | 540 | 102 | | | 0 | 4 | 1 |
| 6 | 12 | 2001 | 27 | 540 | 103 | | | 0 | 0 | 1 |
| 6 | 12 | 2001 | 28 | 560 | 104 | 4629.924 | 9054.084 | 0 | 3 | 1 |
| 6 | 12 | 2001 | 28 | 560 | 105 | | | 0 | 7 | |
| 6 | 12 | 2001 | 28 | 560 | 106 | | | 9 | 6 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 107 | | | 17 | 3 | |
| 6 | 12 | 2001 | 28 | 560 | 108 | | | 25 | 4 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 109 | | | 35 | 6 | |
| 6 | 12 | 2001 | 28 | 560 | 110 | | | 38 | 4 | 2 |

Appendix B. Continued.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 28 | 560 | 111 | 37 | 6 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 112 | 48 | 6 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 113 | 51 | 6 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 114 | 48 | 5 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 115 | 53 | 6 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 116 | 38 | 6 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 117 | 30 | 8 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 118 | 32 | 8 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 119 | 42 | 8 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 120 | 47 | 5 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 121 | 51 | 6 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 122 | 48 | 6 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 123 | 49 | 7 | |
| 6 | 12 | 2001 | 28 | 560 | 124 | 45 | 6 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 125 | 43 | 5 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 126 | 43 | 6 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 127 | 30 | 7 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 128 | 32 | 6 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 129 | 26 | 6 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 100 | 20 | 6 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 101 | 26 | 5 | |
| 6 | 12 | 2001 | 28 | 560 | 102 | 20 | 5 | |
| 6 | 12 | 2001 | 28 | 560 | 103 | 18 | 6 | |
| 6 | 12 | 2001 | 28 | 560 | 104 | 10 | 1 | 2 |
| 6 | 12 | 2001 | 28 | 560 | 105 | 0 | 0 | 1 |
| 6 | 12 | 2001 | 28 | 560 | 106 | 0 | | 3 |
| 6 | 12 | 2001 | 28 | 560 | 107 | 0 | 0 | 1 |

Appendix B. Continued.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 28 | 560 | 108 | | | 0 | 0 | 1 |
| 6 | 12 | 2001 | 29 | 580 | 109 | 4629.928 | 9054.068 | 0 | 3 | 1 |
| 6 | 12 | 2001 | 29 | 580 | 110 | | | 0 | 5 | 1 |
| 6 | 12 | 2001 | 29 | 580 | 111 | | | 0 | 0 | 1 |
| 6 | 12 | 2001 | 29 | 580 | 112 | | | 45 | 7 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 113 | | | 38 | 7 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 114 | | | 23 | 7 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 115 | | | 58 | 5 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 116 | | | 40 | 8 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 117 | | | 43 | 6 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 118 | | | 45 | 5 | |
| 6 | 12 | 2001 | 29 | 580 | 119 | | | 42 | 6 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 120 | | | 43 | 7 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 121 | | | 16 | 7 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 122 | | | 45 | 8 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 123 | | | 47 | 8 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 124 | | | 44 | 8 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 125 | | | 17 | 7 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 126 | | | 26 | 5 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 127 | | | 40 | 6 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 128 | | | 48 | 6 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 129 | | | 35 | 5 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 100 | | | 33 | 5 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 101 | | | 30 | 5 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 102 | | | 25 | 5 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 103 | | | 25 | 5 | 2 |
| 6 | 12 | 2001 | 29 | 580 | 104 | | | 24 | 5 | 2 |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 29 | 580 | 105 | | | 22 | 7 | 2 | |
| 6 | 12 | 2001 | 29 | 580 | 106 | | | 20 | 6 | 2 | |
| 6 | 12 | 2001 | 29 | 580 | 107 | | | 18 | 6 | 2 | |
| 6 | 12 | 2001 | 29 | 580 | 108 | | | 28 | 5 | | |
| 6 | 12 | 2001 | 29 | 580 | 109 | | | 19 | 5 | 2 | |
| 6 | 12 | 2001 | 29 | 580 | 110 | | | 21 | 4 | | |
| 6 | 12 | 2001 | 29 | 580 | 111 | | | 26 | 3 | | |
| 6 | 12 | 2001 | 29 | 580 | 112 | | | 36 | 4 | | |
| 6 | 12 | 2001 | 29 | 580 | 113 | | | 32 | 5 | | |
| 6 | 12 | 2001 | 29 | 580 | 114 | | | 17 | 3 | | |
| 6 | 12 | 2001 | 29 | 580 | 115 | | | 0 | 0 | | |
| 6 | 12 | 2001 | 30 | 600 | 116 | 4629.916 | 9054.067 | | | | Too deep to sample |
| 6 | 12 | 2001 | 31 | 620 | 117 | 4629.924 | 9054.042 | 0 | 0 | 1 | |
| 6 | 12 | 2001 | 31 | 620 | 118 | | | 0 | 0 | 1 | |
| 6 | 12 | 2001 | 31 | 620 | 119 | | | 30 | 6 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 120 | | | 50 | 4 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 121 | | | 75 | 8 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 122 | | | 40 | 8 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 123 | | | 55 | 8 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 124 | | | 50 | 8 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 125 | | | 82 | 8 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 126 | | | 58 | 8 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 127 | | | 76 | 8 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 128 | | | 56 | 8 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 129 | | | 55 | 8 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 100 | | | 45 | 8 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 101 | | | 35 | 8 | 2 | |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 31 | 620 | 102 | | | 90 | 8 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 103 | | | 85 | 8 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 104 | | | 58 | 8 | 2 | |
| 6 | 12 | 2001 | 31 | 620 | 105 | | | 0 | 8 | | |
| 6 | 12 | 2001 | 32 | 640 | 106 | 4629.923 | 9054.025 | | | | Too deep to sample |
| 6 | 12 | 2001 | 33 | 660 | 107 | 4629.926 | 9054.018 | | | | Too deep to sample |
| 6 | 12 | 2001 | 34 | 680 | 108 | 4629.941 | 9053.997 | 0 | 0 | 1 | |
| 6 | 12 | 2001 | 34 | 680 | 109 | | | 0 | 0 | 1 | |
| 6 | 12 | 2001 | 34 | 680 | 110 | | | 47 | 5 | | |
| 6 | 12 | 2001 | 34 | 680 | 111 | | | 55 | 4 | | |
| 6 | 12 | 2001 | 34 | 680 | 112 | | | 67 | 5 | | |
| 6 | 12 | 2001 | 34 | 680 | 113 | | | 68 | 7 | | |
| 6 | 12 | 2001 | 34 | 680 | 114 | | | 85 | 4 | | |
| 6 | 12 | 2001 | 34 | 680 | 115 | | | 68 | 6 | | |
| 6 | 12 | 2001 | 34 | 680 | 116 | | | 89 | 6 | | |
| 6 | 12 | 2001 | 34 | 680 | 117 | | | 79 | 7 | | Too deep to sample |
| 6 | 12 | 2001 | 35 | 700 | 118 | 4629.939 | 9053.993 | 0 | | 3,1 | |
| 6 | 12 | 2001 | 35 | 700 | 119 | | | 0 | | | |
| 6 | 12 | 2001 | 35 | 700 | 120 | | | 4 | 0 | 2 | |
| 6 | 12 | 2001 | 35 | 700 | 121 | | | 25 | 4 | 2 | |
| 6 | 12 | 2001 | 35 | 700 | 122 | | | 29 | 4 | 2 | |
| 6 | 12 | 2001 | 35 | 700 | 123 | | | 29 | 6 | 2 | |
| 6 | 12 | 2001 | 35 | 700 | 124 | | | 35 | 4 | 2 | |
| 6 | 12 | 2001 | 35 | 700 | 125 | | | 35 | 6 | 2 | |
| 6 | 12 | 2001 | 35 | 700 | 126 | | | 50 | 6 | 2 | |
| 6 | 12 | 2001 | 35 | 700 | 127 | | | 49 | 6 | 2 | |
| 6 | 12 | 2001 | 35 | 700 | 128 | | | 70 | 6 | 2 | |

Appendix B. Continued.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 35 | 700 | 129 | | | 75 | 6 | 2 |
| 6 | 12 | 2001 | 35 | 700 | 100 | | | 90 | 5 | 2 |
| 6 | 12 | 2001 | 35 | 700 | 101 | | | 80 | 6 | 2 |
| 6 | 12 | 2001 | 35 | 700 | 102 | | | 65 | 7 | 2 |
| 6 | 12 | 2001 | 35 | 700 | 103 | | | 70 | 5 | 2 |
| 6 | 12 | 2001 | 35 | 700 | 104 | | | 45 | 7 | 2 |
| 6 | 12 | 2001 | 35 | 700 | 105 | | | 75 | 6 | 2 |
| 6 | 12 | 2001 | 35 | 700 | 106 | | | 80 | 5 | 2 |
| 6 | 12 | 2001 | 35 | 700 | 107 | | | 70 | 7 | 2 |
| 6 | 12 | 2001 | 35 | 700 | 108 | | | 70 | 5 | 2 |
| 6 | 12 | 2001 | 35 | 700 | 109 | | | 60 | 4 | 2 |
| 6 | 12 | 2001 | 35 | 700 | 110 | | | 65 | 4 | |
| 6 | 12 | 2001 | 35 | 700 | 111 | | | 62 | 4 | |
| 6 | 12 | 2001 | 35 | 700 | 112 | | | 63 | 4 | |
| 6 | 12 | 2001 | 35 | 700 | 113 | | | 66 | 5 | |
| 6 | 12 | 2001 | 35 | 700 | 114 | | | 63 | 5 | |
| 6 | 12 | 2001 | 35 | 700 | 115 | | | 0 | 0 | 1 |
| 6 | 12 | 2001 | 36 | 720 | 116 | 4629.951 | 9053.991 | 0 | 3 | 1 |
| 6 | 12 | 2001 | 36 | 720 | 117 | | | 0 | 0 | 1 |
| 6 | 12 | 2001 | 36 | 720 | 118 | | | 9 | 6 | 2 |
| 6 | 12 | 2001 | 36 | 720 | 119 | | | 24 | 4 | |
| 6 | 12 | 2001 | 36 | 720 | 120 | | | 20 | 6 | 2 |
| 6 | 12 | 2001 | 36 | 720 | 121 | | | 34 | 4 | 2 |
| 6 | 12 | 2001 | 36 | 720 | 122 | | | 26 | 6 | |
| 6 | 12 | 2001 | 36 | 720 | 123 | | | 30 | 5 | 2 |
| 6 | 12 | 2001 | 36 | 720 | 124 | | | 35 | 5 | 2 |
| 6 | 12 | 2001 | 36 | 720 | 125 | | | 35 | 6 | 2 |

Appendix B. Continued.

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|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 36 | 720 | 126 | | | 45 | 3 | 2 |
| 6 | 12 | 2001 | 36 | 720 | 127 | | | 46 | 5 | 2 |
| 6 | 12 | 2001 | 36 | 720 | 128 | | | 49 | 7 | |
| 6 | 12 | 2001 | 36 | 720 | 129 | | | 56 | 7 | |
| 6 | 12 | 2001 | 36 | 720 | 100 | | | 68 | 5 | |
| 6 | 12 | 2001 | 36 | 720 | 101 | | | 60 | 5 | |
| 6 | 12 | 2001 | 36 | 720 | 102 | | | 65 | 6 | |
| 6 | 12 | 2001 | 36 | 720 | 103 | | | 68 | 4 | |
| 6 | 12 | 2001 | 36 | 720 | 104 | | | 73 | 5 | 2 |
| 6 | 12 | 2001 | 36 | 720 | 105 | | | 85 | 4 | |
| 6 | 12 | 2001 | 36 | 720 | 106 | | | 90 | 6 | |
| 6 | 12 | 2001 | 36 | 720 | 107 | | | 80 | 7 | |
| 6 | 12 | 2001 | 36 | 720 | 108 | | | 76 | 4 | |
| 6 | 12 | 2001 | 36 | 720 | 109 | | | 77 | 5 | |
| 6 | 12 | 2001 | 36 | 720 | 110 | | | 75 | 6 | |
| 6 | 12 | 2001 | 36 | 720 | 111 | | | 68 | 6 | |
| 6 | 12 | 2001 | 36 | 720 | 112 | | | 52 | 6 | |
| 6 | 12 | 2001 | 36 | 720 | 113 | | | 0 | | 3 |
| 6 | 12 | 2001 | 37 | 740 | 114 | 4629.976 | 9053.992 | 0 | 0 | 1 |
| 6 | 12 | 2001 | 37 | 740 | 115 | | | 0 | 0 | 1 |
| 6 | 12 | 2001 | 37 | 740 | 116 | | | 0 | 0 | 1 |
| 6 | 12 | 2001 | 37 | 740 | 117 | | | 19 | 4 | |
| 6 | 12 | 2001 | 37 | 740 | 118 | | | 16 | 4 | |
| 6 | 12 | 2001 | 37 | 740 | 119 | | | 17 | 4 | |
| 6 | 12 | 2001 | 37 | 740 | 120 | | | 10 | 4 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 121 | | | 0 | 4 | 1 |
| 6 | 12 | 2001 | 37 | 740 | 122 | | | 0 | | |

Appendix B. Continued.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 37 | 740 | 123 | 1 | 4 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 124 | 13 | 4 | |
| 6 | 12 | 2001 | 37 | 740 | 125 | 0 | 5 | 1 |
| 6 | 12 | 2001 | 37 | 740 | 126 | 0 | 5 | 1 |
| 6 | 12 | 2001 | 37 | 740 | 127 | 0 | 4 | |
| 6 | 12 | 2001 | 37 | 740 | 128 | 0 | 3 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 129 | 2 | | |
| 6 | 12 | 2001 | 37 | 740 | 100 | 13 | 6 | |
| 6 | 12 | 2001 | 37 | 740 | 101 | 26 | 4 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 102 | 10 | 6 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 103 | 22 | 5 | |
| 6 | 12 | 2001 | 37 | 740 | 104 | 34 | 4 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 105 | 40 | 4 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 106 | 40 | 5 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 107 | 48 | 4 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 108 | 50 | 6 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 109 | 56 | 4 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 110 | 58 | 7 | |
| 6 | 12 | 2001 | 37 | 740 | 111 | 60 | 6 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 112 | 67 | 4 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 113 | 83 | 6 | 2 |
| 6 | 12 | 2001 | 37 | 740 | 114 | 65 | 7 | |
| 6 | 12 | 2001 | 37 | 740 | 115 | 78 | 6 | |
| 6 | 12 | 2001 | 37 | 740 | 116 | 77 | 5 | |
| 6 | 12 | 2001 | 37 | 740 | 117 | 80 | 5 | |
| 6 | 12 | 2001 | 37 | 740 | 118 | 59 | 6 | |
| 6 | 12 | 2001 | 37 | 740 | 119 | 56 | 4 | |

Appendix B. Continued.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 37 | 740 | 120 | | | 54 | 5 | | |
| 6 | 12 | 2001 | 37 | 740 | 121 | | | 26 | 1 | 2 | |
| 6 | 12 | 2001 | 37 | 740 | 122 | | | 0 | 0 | 1 | |
| 6 | 12 | 2001 | 38 | 760 | 123 | 4629.988 | 9053.983 | 0 | 1 | 1 | |
| 6 | 12 | 2001 | 38 | 760 | 124 | | | 0 | 0 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 125 | | | 3 | | | |
| 6 | 12 | 2001 | 38 | 760 | 126 | | | 16 | 5 | 2 | 1 |
| 6 | 12 | 2001 | 38 | 760 | 127 | | | 20 | 5 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 128 | | | 20 | 5 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 129 | | | 19 | 4 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 100 | | | 19 | 5 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 101 | | | 15 | 6 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 102 | | | 15 | 5 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 103 | | | 16 | 5 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 104 | | | 25 | 5 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 105 | | | 29 | 5 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 106 | | | 28 | 6 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 107 | | | 34 | 5 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 108 | | | 41 | 4 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 109 | | | 55 | 4 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 110 | | | 52 | 4 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 111 | | | 54 | 6 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 112 | | | 56 | 6 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 113 | | | 58 | 6 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 114 | | | 67 | 5 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 115 | | | 71 | 6 | 2 | |
| 6 | 12 | 2001 | 38 | 760 | 116 | | | 64 | 6 | 2 | |

Appendix B. Continued.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 38 | 760 | 117 | | | 62 | 5 | 2 |
| 6 | 12 | 2001 | 38 | 760 | 118 | | | 60 | 4 | 2 |
| 6 | 12 | 2001 | 38 | 760 | 119 | | | 49 | 5 | 2 |
| 6 | 12 | 2001 | 38 | 760 | 120 | | | 28 | 4 | 2 |
| 6 | 12 | 2001 | 38 | 760 | 121 | | | 0 | 0 | 1 |
| 6 | 12 | 2001 | 39 | 780 | 122 | 4629.992 | 9053.972 | 0 | 0 | 1 |
| 6 | 12 | 2001 | 39 | 780 | 123 | | | 0 | | |
| 6 | 12 | 2001 | 39 | 780 | 124 | | | 41 | 4 | 2 |
| 6 | 12 | 2001 | 39 | 780 | 125 | | | 25 | 7 | |
| 6 | 12 | 2001 | 39 | 780 | 126 | | | 25 | 5 | |
| 6 | 12 | 2001 | 39 | 780 | 127 | | | 14 | 6 | 2 |
| 6 | 12 | 2001 | 39 | 780 | 128 | | | 15 | 5 | 2 |
| 6 | 12 | 2001 | 39 | 780 | 129 | | | 13 | 7 | |
| 6 | 12 | 2001 | 39 | 780 | 100 | | | 16 | 6 | 2 |
| 6 | 12 | 2001 | 39 | 780 | 101 | | | 25 | 5 | 2 |
| 6 | 12 | 2001 | 39 | 780 | 102 | | | 31 | 5 | 2 |
| 6 | 12 | 2001 | 39 | 780 | 103 | | | 35 | 5 | 2 |
| 6 | 12 | 2001 | 39 | 780 | 104 | | | 47 | 6 | 2 |
| 6 | 12 | 2001 | 39 | 780 | 105 | | | 65 | 6 | 2 |
| 6 | 12 | 2001 | 39 | 780 | 106 | | | 69 | 5 | |
| 6 | 12 | 2001 | 39 | 780 | 107 | | | 60 | 5 | |
| 6 | 12 | 2001 | 39 | 780 | 108 | | | 65 | 6 | |
| 6 | 12 | 2001 | 39 | 780 | 109 | | | 58 | 6 | |
| 6 | 12 | 2001 | 39 | 780 | 110 | | | 50 | 6 | |
| 6 | 12 | 2001 | 39 | 780 | 111 | | | 53 | 4 | |
| 6 | 12 | 2001 | 39 | 780 | 112 | | | 19 | 5 | |
| 6 | 12 | 2001 | 39 | 780 | 113 | | | 0 | 0 | 1 |

Appendix B. Continued.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 40 | 800 | 114 | 0 | 0 | |
| 6 | 12 | 2001 | 40 | 800 | 115 | 0 | 0 | |
| 6 | 12 | 2001 | 40 | 800 | 116 | 0 | 0 | |
| 6 | 12 | 2001 | 40 | 800 | 117 | 27 | 5 | |
| 6 | 12 | 2001 | 40 | 800 | 118 | 28 | 4 | |
| 6 | 12 | 2001 | 40 | 800 | 119 | 19 | 3 | |
| 6 | 12 | 2001 | 40 | 800 | 120 | 26 | 4 | |
| 6 | 12 | 2001 | 40 | 800 | 121 | 26 | 5 | |
| 6 | 12 | 2001 | 40 | 800 | 122 | 23 | 6 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 123 | 29 | 6 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 124 | 30 | 6 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 125 | 27 | 6 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 126 | 39 | 6 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 127 | 36 | 7 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 128 | 30 | 6 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 129 | 40 | 6 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 100 | 40 | 5 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 101 | 35 | 7 | |
| 6 | 12 | 2001 | 40 | 800 | 102 | 34 | 7 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 103 | 40 | 7 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 104 | 37 | 6 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 105 | 30 | 7 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 106 | 35 | 7 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 107 | 37 | 7 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 108 | 24 | 5 | 2 |
| 6 | 12 | 2001 | 40 | 800 | 109 | 0 | 6 | |
| 6 | 12 | 2001 | 40 | 800 | 110 | 0 | 0 | 1 |

Appendix B. Continued.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 41 | 820 | 111 | 0 | 0 | 1 |
| 6 | 12 | 2001 | 41 | 820 | 112 | 0 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 113 | 0 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 114 | 20 | 1 | |
| 6 | 12 | 2001 | 41 | 820 | 115 | 13 | 2 | |
| 6 | 12 | 2001 | 41 | 820 | 116 | 2 | 2 | |
| 6 | 12 | 2001 | 41 | 820 | 117 | 9 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 118 | 9 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 119 | 15 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 120 | 20 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 121 | 22 | 6 | |
| 6 | 12 | 2001 | 41 | 820 | 122 | 28 | 5 | |
| 6 | 12 | 2001 | 41 | 820 | 123 | 30 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 124 | 25 | 4 | 2 |
| 6 | 12 | 2001 | 41 | 820 | 125 | 19 | 5 | |
| 6 | 12 | 2001 | 41 | 820 | 126 | 18 | 5 | |
| 6 | 12 | 2001 | 41 | 820 | 127 | 13 | 5 | 2 |
| 6 | 12 | 2001 | 41 | 820 | 128 | 25 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 129 | 25 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 130 | 17 | 5 | 2 |
| 6 | 12 | 2001 | 41 | 820 | 131 | 18 | 5 | |
| 6 | 12 | 2001 | 41 | 820 | 132 | 15 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 133 | 23 | 5 | |
| 6 | 12 | 2001 | 41 | 820 | 134 | 30 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 135 | 38 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 136. | 25 | 5 | |
| 6 | 12 | 2001 | 41 | 820 | 137 | 35 | 4 | |

Appendix B. Continued.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 6 | 12 | 2001 | 41 | 820 | 138 | 30 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 139 | 300 | 5 | |
| 6 | 12 | 2001 | 41 | 820 | 140 | 28 | 7 | |
| 6 | 12 | 2001 | 41 | 820 | 141 | 35 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 142 | 30 | 6 | |
| 6 | 12 | 2001 | 41 | 820 | 143 | 25 | 4 | 2 |
| 6 | 12 | 2001 | 41 | 820 | 144 | 30 | 3 | 2 |
| 6 | 12 | 2001 | 41 | 820 | 145 | 25 | 5 | |
| 6 | 12 | 2001 | 41 | 820 | 146 | 25 | 6 | |
| 6 | 12 | 2001 | 41 | 820 | 147 | 17 | 5 | |
| 6 | 12 | 2001 | 41 | 820 | 148 | 5 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 149 | 4 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 150 | 0 | 4 | |
| 6 | 12 | 2001 | 41 | 820 | 151 | 0 | 4 | |