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A Documentation of Virginia Trawl Surverys, 1955-1984, Listing Pertinent Variables: Date, Station Location, Gear, Vessel, Tow Direction, and Type of Survey Volume V: Potomac River

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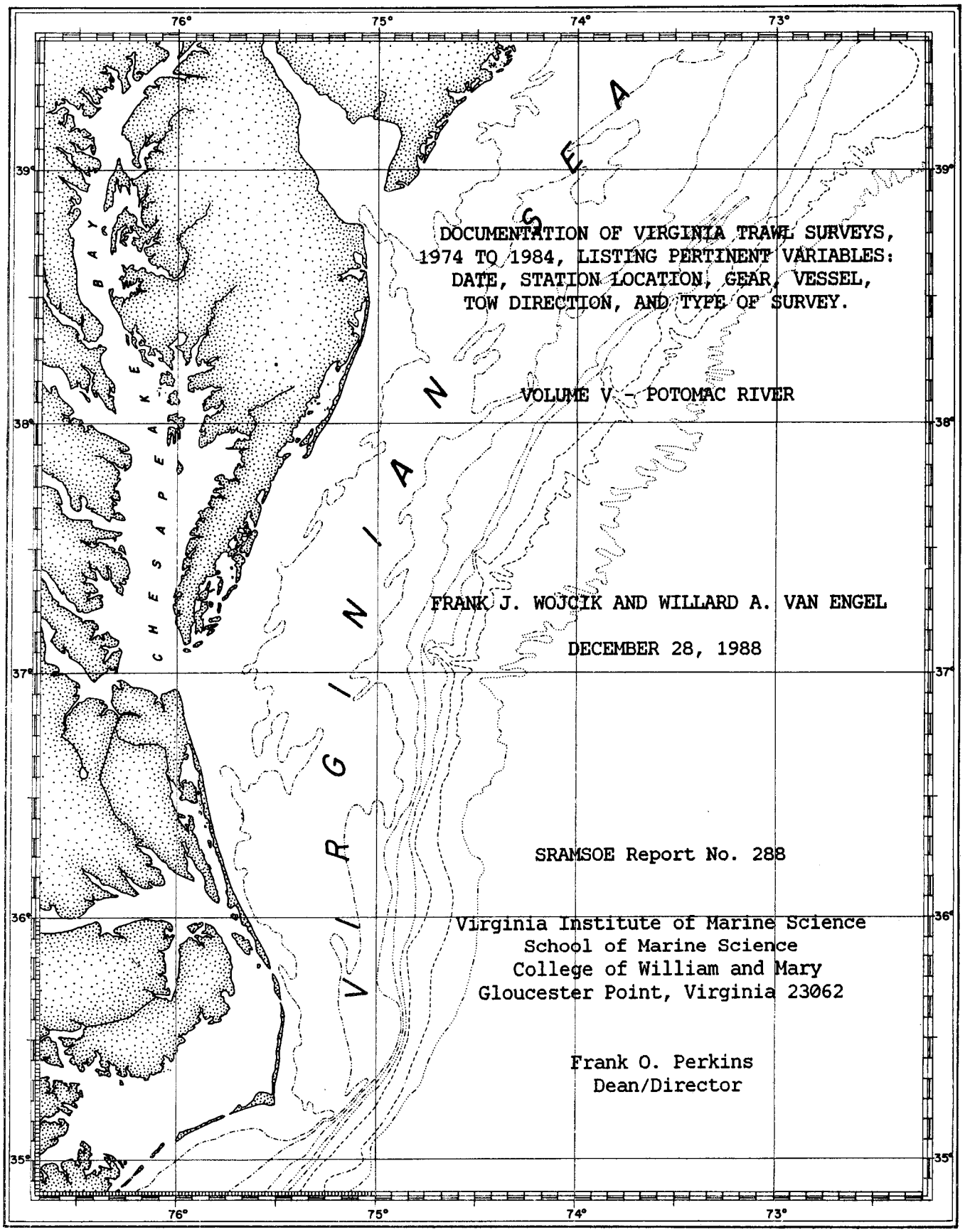

DOCUMENTATION OF VIRGINIA TRAWL SURVEYS, 1974 TO 1984, LISTING PERTINENT VARIABLES: DATE, STATION LOCATION, GEAR, VESSEL, TOW DIRECTION, AND TYPE OF SURVEY.

VOLUME V - POTOMAC RIVER

FRANK J. WOJCIK AND WILLARD A. VAN ENGEL

DECEMBER 28, 1988

SRAMSOE Report No. 288

Virginia Institute of Marine Science
School of Marine Science
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TABLE OF CONTENTS

LIST OF FIGURES

DOCUMENTATION OF VIRGINIA TRAWL SURVEYS, 1974-1984, LISTING PERTINENT VARIABLES: DATE, STATION LOCATION, GEAR, VESSEL, TOW DIRECTION, AND TYPE OF SURVEY.

VOLUME V -POTOMAC RIVER

The Virginia Institute of Marine Science (VIMS) has been conducting trawl surveys in Virginia's portion of Chesapeake bay and its tributary rivers since 1955. The purpose of the surveys is to monitor stocks of young-of-the year fishes in those waters. In addition, the surveys provide information on life history, growth, movements and the dynamics of Chesapeake Bay fish populations. Data are stored on magnetic tape, using the Prime 9955 computer at VIMS. Abundance data are stored in Fortran (F77) files called "Afish"//Yrs. In addition, another set of Fortran (F77) files "Frank.19"//Yrs contains the corresponding length measurement data. Collectively, these files contain about 120,000 records for the York, James, Rappahannock, and Potomac rivers, and in the Chesapeake Bay for the years 1955 to 1984.

Initially all of the data were collected with a 30' semi-balloon otter trawl, but later a smaller 16' semi-balloon otter trawl was added for use in confined or shallow areas. The 30' semi-balloon trawl used in 1955 was manufactured by the Marinovich Trawl Co. Steve Marinovich, owner of that company has provided us with copies of the original net drawings including specifications. He was also able to provide us with information on changes made in the trawls over the years. These specifications are presented in Figures 2 and 3, and Appendices B and C. Those show that in subsequent years changes were made in the body and wings of the trawls, along with changes from unlined to lined cod-end. Cotton thread used originally in the construction of the early trawls, was replaced by nylon. In addition to changes in trawl dimension, there were rigging changes and changes in the dimensions of the trawl boards and in the bridle lengths. Recently, a tickler chain was added. Lastly net makers have changed: hopefully trawls purchased from other net companies were fabricated according to the current "Marinovich" specifications.

William H. Massmann, who initiated the surveys adopted a fixed, rather than a randomized station plan, to be run in the deep channels of all rivers. Subsequent investigators followed the same plan until 1973, at which time Walter J. Hoagman and W. Jackson Davis of the VIMS Fisheries Department decided that a change in procedure to a stratified, randomized, semi-annual (summer and winter) survey was needed. A statistical review of the accumulated trawl data had revealed that the samples for any month were too small to be significant, and in addition were not suitable for any statistical analysis because they were not random. The first randomizations were made by latitude and longitude from the various depth strata, which proved awkward and were altered in 1978. This new randomization plan called for the division of each river into four depth strata, each stratum sectioned into quarter mile blocks. In each stratum, the blocks were permanently numbered progressively up-river to the end of sampling area, and then numbering was resumed at the mouth of the river for the next stratum.

Numbers were not duplicated within a river. Later a fifth depth stratum was added. Latitudes and longitudes for the random stations are presented by depth strata in Appendices D and E. When a new survey was planned, the stations to be occupied were drawn from a table of random numbers. This proved to be time consuming, so a program was developed by Frank J. Wojcik in Fortran (F77) for drawing random stations using the random number generator programmed into the computer.

Failure of the semi-annual, randomized, stratified plan became apparent in 1979 when the the trawl surveys failed to provide any indication of the huge buildup in the weakfish population. Examination of all York River weakfish data (1955 to 1979) showed that the semi-annual trawl survey sampled the areas at the time of the year when juvenile weakfish were not present. Based upon this evidence Frank J. Wojcik and John V. Merriner felt it was imperative that the smaller, monthly, non-random channel surveys be resumed, especially when it was noted that different species use the river nursery grounds at different times of the year. When this was done in the York River in 1979, a large catch of juvenile weakfish was obtained, all within the period September through November. This demonstrated conclusively that within the constraints of time and money, that the fixed, monthly, channel sampling was the better plan, and was resumed for all rivers in May of 1981 and has continued to the present.

Because of the various changes in gear and procedure that have occurred over the course of the surveys, it was felt the changes should be documented. The format of the data, presented with some explanation of the abbreviations used, is given in Table 1. Vessel codes in Appendix A, gear codes and their corresponding gear descriptions are presented in Appendices B and C, while station locations are presented in in Appendices D to F.

The amount of survey data was so voluminous that it was decided that documentation would best be presented separately for each area. The volume setup follows. Volume I has the data for Chesapeake Bay, Volume II for the York River, Volume III for the James River, Volume IV for the Rappahannock River and Volume V for the Potomac River. Date, station location, gear type and specifications, vessel, tow direction and type of survey (fixed or random) are tabulated.

Potomac River 1974-1984 (Volume V)

Volume V describes the surveys on the Potomac River which, because it is the most distant river from VIMS, was the last on which a survey was begun (1974). While it is the largest of the rivers we sampled, it is the one on which we have sampled the least. Fixed, channel trawl stations were made in the Potomac between 1974 and February 1976. Stations of the stratified random type were added in January 1975. Sampling during the summer of 1979 was of the fixed type. No stations were occupied in 1980. In the winter of 1981 and 1982 stations were random, and from the summer of 1982 through 1984 all sampling was again of the fixed channel type. Fixed sampling consisted generally of a survey starting at the mouth of the river (P000), and continuing upriver 65 miles to about the Quantico Marine Base (P065), occasionally to mile 94, Washington, D.C. (P094). However, the section of river between P021, and P044 is in a restricted area and was not sampled.

POTOMAC RIVER SAMPLE SITES

For the years 1974-1984, FIXED STATIONS (F) coded as P0000-P0020, P0045-P0094 by either 1 or 5 mile intervals, are located by latitudes and longitudes in Appendix D. A tow time of 25 indicates a quarter of a mile distance towed rather than the actual time.

For the years 1975-1976, RANDOM STATIONS (R) coded as P0000n-P0094n were 1/4 mile stations in each 1-mile block. The numerical value of n, the fourth digit, describes the location of the 1/4 mile section. When n is blank = first 1/4 mile, 1 = between 1/4 and 1/2 mile, 2 = between 1/2 and 3/4 mile, 3 = between 3/4 and the next whole mile. A tow time of 25 indicates a quarter mile distance towed, rather than the actual time. Locations are shown to the nearest 1/4 mile in Appendix E.

For the years 1977-1983, RANDOM STATIONS (R) with the following codes are shown in Appendix F. A tow time of 25 indicates a quarter of a mile distance towed rather than the actual time.

P0001-P0271 were at depths between 12' and 19' and were designated as green (G) sites.

P0301-P0840 were at depths between 20' and 29' and were designated as blue (B) sites.

P0891-P01392 were at depths between 30' and 49' and were designated as white (W) sites.

P01403-P01596 were at depths over 49' and were designated as red (R) sites.

Table 1 -VARIABLES ASSIGNED TO THE VIMS TRAWL SURVEYS.

1. MO/DA	Month and day of collection.
2. F, R	Fixed (F) or stratified random (R) station.
3. SAMPLE SITE	One or two letter code designating the river or bay site, followed by either (a) the number of nautical miles from the mouth of the river; or (b) a specific location, e.g., YKN10 indicates this station was made on the north side of the York River channel about mile 10; or (c) three or four numbers representing quarter-mile blocks. Detailed codes for each river and bay are given in specific volumes.
4. COLL NOS.	Survey code (2-letters), followed by a 3-digit collection number, sequential for each year. F for Fisheries Department: 1955-1964, 1966-1972. N for Nursery Ground Study: 1965 A for Alosa Survey: 973-1975 I for Ichthyology Department: 1974-1982. L for Data collected by Linda Pushee Mercer: 1971.
5. VESSEL	Two-letter code used until mid-1981, then a gradual change to a 2-digit code (See Appendix A).
6. GR CD	Two-digit gear code (See Appendix B).
7. W, A	Direction of tow: W with tide, A against tide.
8. TOW	Tow time, 1-15 minutes, is the length of time that the trawl was pulled over the bottom at full trawling speed. Since speed for a given rpm varied with vessels used, the rpm needed to produce a slack water ground speed of 3 mph was calibrated for each vessel. A recorded time of over 15 minutes indicates actual distance covered, instead of time trawled: thus, a value of 25 corresponds to a quarter of a mile, 0.25 M.
9. DOOR	Door sizes varied: 48" x 22" and 54" x 25" for 30' trawls and 24' x 12' for the 16' trawl net (see Appendix B).
10. TICK CHAN	NO-tickler chain not used. YES-tickler chain used (see Appendix B).
11. BDL LGT	Length of bridle was not considered important in the early phases of the survey and it was not until comparison tows were made that attention was paid to this variable. A 90' bridle with the 30' trawl appears to provide the maximum catch, but was found to be too long for some waters, so a 60' bridle was adopted as the present standard (see Appendix B).

12. TRAWL TYPE Trawls were of three types: 30' semi-balloon (30'SB), 16' semi-balloon (16'SB), and 16' two-seam (16'2S).

13. BODY MESH Body mesh varied: 1" through 1960, then generally 1-1/2" when new, but shrinking considerably with time, especially in the early cotton nets (see Appendix B).

14. THD TYP Thread type varied from cotton (C) to nylon (N). At some stage, both types were probably in use (see Appendix B and C).

15. LINER MESH Cod end was either unlined, or lined (L) with 1/2" stretched mesh or 1/4" bar mesh (see Appendix B).

16. BAG MESH Bag mesh was 3/4" through 1960, then 1-1/4", but some shrinkage occurred (see Appendix B). Mesh on 16' trawl was 1-1/4" throughout entire use.

FIGURE 1 Chart of The Potomac River.

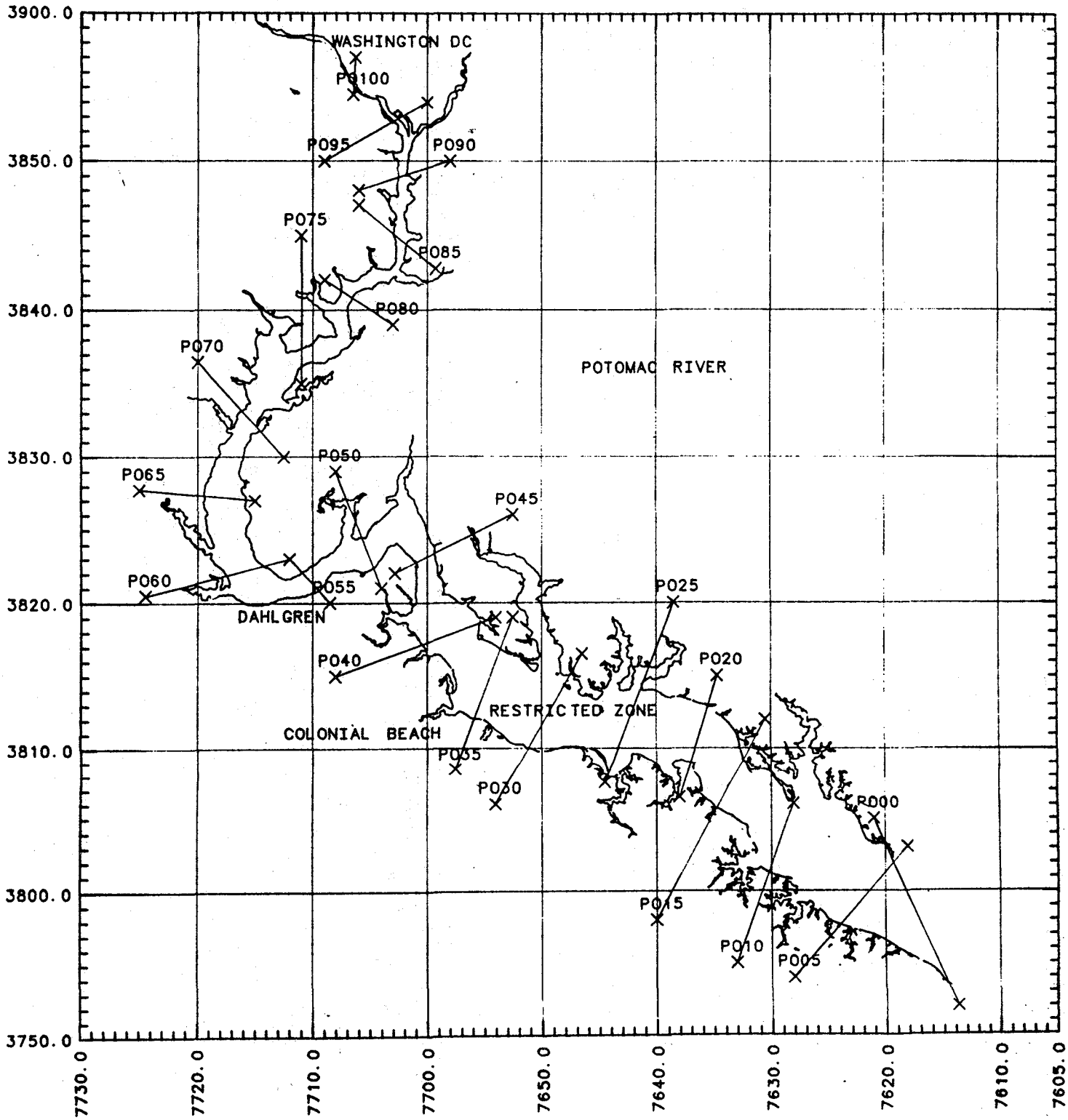
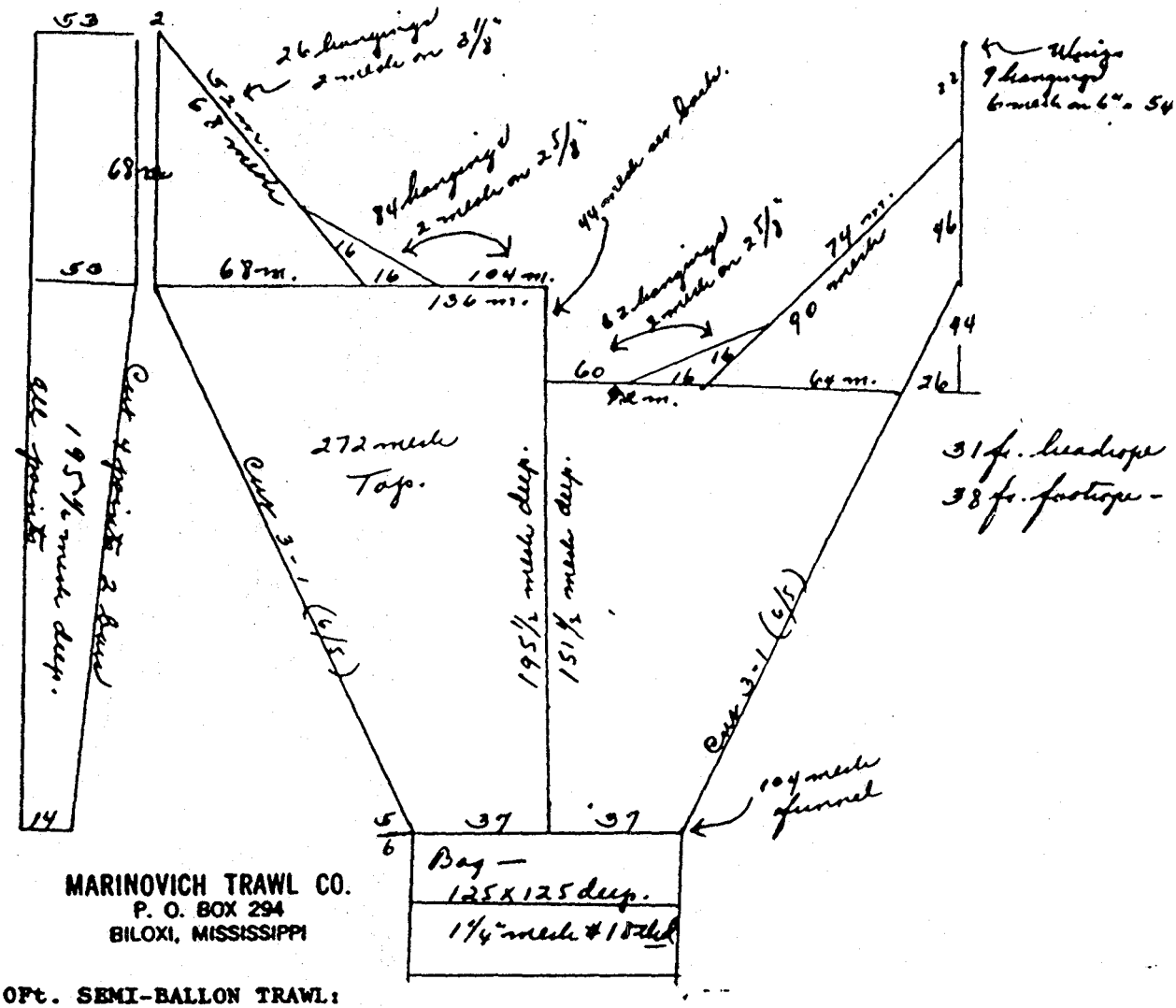


FIGURE 2 Diagram of the Original VIMS 30' Trawl.



30Ft. SEMI-BALLON TRAWL:
3Ift. headrope , 37ft. footrope , net made of cotton netting of the following size mesh and thread; I½ inch mesh # 9 thread body , I¼ inch mesh # I8 thread bag , net hung on 7/I6 inch diameter hemp net rope , legs extended from net 6ft. with wire rope thimbels spliced at each end , 2/0 galvanized chain on footrope, hung loop style , I6 links to I2 inches , Aek floats on headrope , nets treated in green net preservative , comnlete in every respect , code 68 H 3 & 2½ inch.

TRAWL DOORS : Suitable for above net, trawl doors 48 inch in length and 22 inch in width, doors made of one inch pine lumber , I½X½ straps and braces, 3/8 X 2½ bottom shoe runner, 3/I6 inch galvanized chainbridle, 3/8 inch swivel , doors set and ready to use.

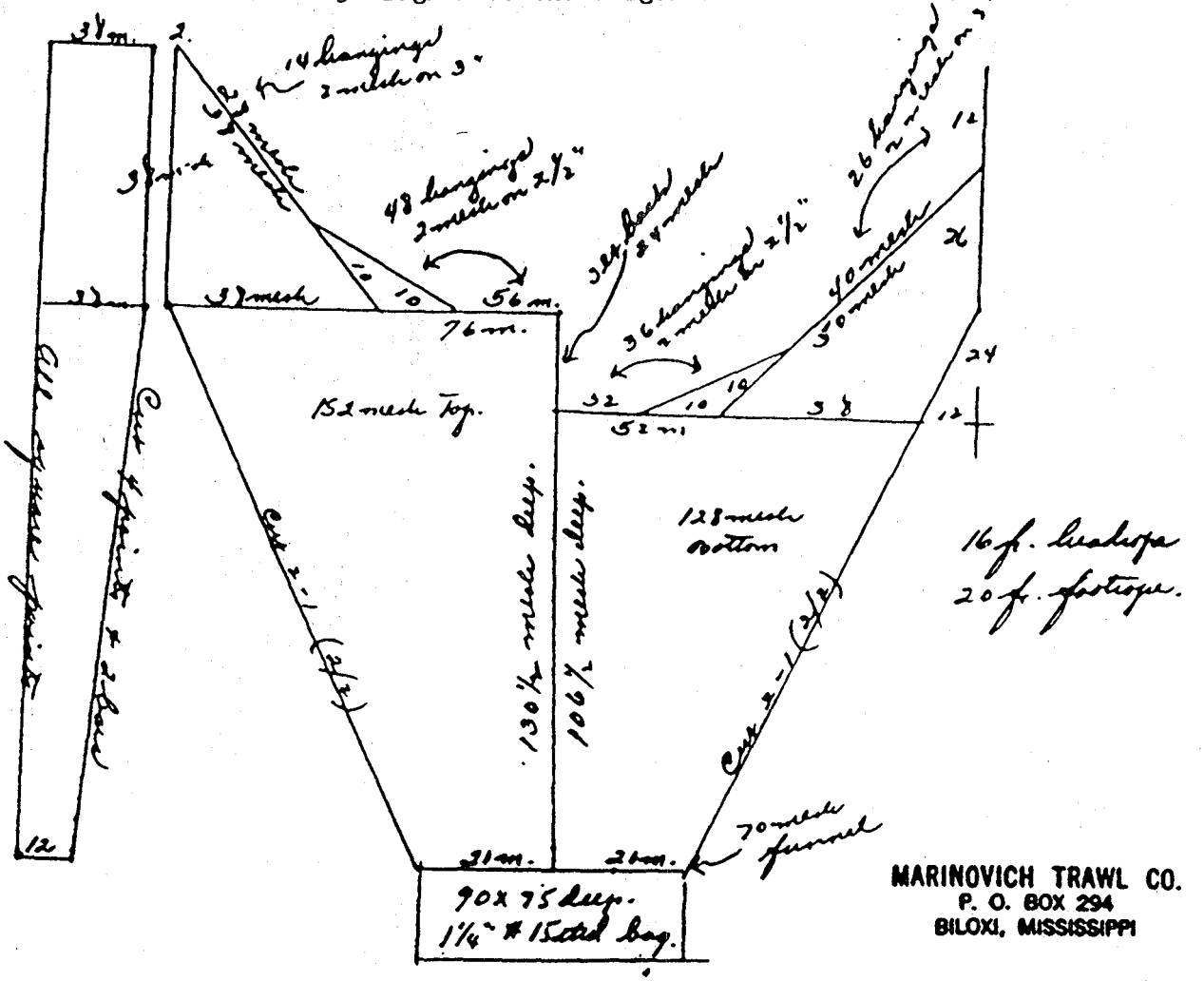
MARINOVICH TRAWL COMPANY

BY Steve J. Marinovich

Steve J. Marinovich

4/20/63.

FIGURE 3 Diagram of the Original VIMS 16' Trawl.



I6ft; SEMI-BALLON TRAWL:
I6ft. headrope , 20ft. footrope , net made of nylon netting of the following size mesh and thread; I½ inch mesh # 9 thread body , I¼ inch mesh # I5 thread bag with an innerliner of ¼ inch stretch mesh # 208 nylon fine yarn netting, net hung on 3/8 inch poly-dac net rope , legs extended from net 3ft. with wire rope thimbels spliced at each end and shackles attached to fasten unto doors, ark floats on headrope , I/8 inch galvanized chain on footrope , loop style , net treated in green copper napthenate net preservative , complete in every respect and ready to use , code 38 N 3 & 2½ inch.

Trawl doors to fit above net;
Trawl doors 24 inch in length and I2 inch in width , doors made of one inch mahogany lumber , straps and braces of I X ¼ inch mild steel , bottom shoe runner of 3/8 X 2 inch mild steel , doors bridled with 2/0 galvanized chain with one 5/I6 inch steel swivel at the head of each bridle , doors set and ready to use ; Towline rigged of 80 ft. of 3/8 inch diameter nylon rope , 20ft .bridle spliced in and rigged with shackles to tow from one line , complete in every respect and ready to use.

MARINOVICH TRAWL COMPANY
BY: Steve J. Marinovich
Steve J. Marinovich III

VIMS ICHTHYOLOGY TRAWL SURVEY -1974
-LISTING BY F.J.WOJCIK MARCH, 1986
FOR DATA SET (AFISH74.XCD)

MO/DA	FR	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
01/14	F	P094	A001	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P093	A002	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P091	A003	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P090	A004	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P089	A005	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P088	A006	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P086	A007	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P085	A008	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P084	A009	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P083	A010	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P081	A011	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P080	A012	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P079	A013	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P078	A014	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P076	A015	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P075	A016	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P074	A017	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P073	A018	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P071	A019	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P070	A020	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	F	P069	A021	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P068	A022	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P066	A023	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P065	A024	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P064	A025	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P063	A026	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P061	A027	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P060	A028	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P059	A029	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P058	A030	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P056	A031	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P055	A032	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P054	A033	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P053	A034	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P051	A035	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P050	A036	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	P049	A037	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
01/15	F	PO48	A038	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	PO46	A039	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	F	PO45	A040	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO20	A041	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO19	A042	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO18	A043	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO16	A044	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO15	A045	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO14	A046	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO13	A047	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO11	A048	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO10	A049	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO09	A050	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO08	A051	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO06	A052	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO05	A053	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO04	A054	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO03	A055	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO01	A056	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/16	F	PO00	A057	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/10	F	PO45	A319	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/10	F	PO50	A320	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/10	F	PO55	A321	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/10	F	PO60	A322	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/10	F	PO65	A323	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/10	F	PO70	A324	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/10	F	PO75	A325	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/10	F	PO80	A326	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/10	F	PO85	A327	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/10	F	PO90	A328	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/10	F	PO94	A329	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/17	F	PO20	A330	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/17	F	PO15	A331	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/17	F	PO10	A332	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/17	F	PO05	A333	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/17	F	PO00	A334	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"

VIMS ICHTHYOLOGY TRAWL SURVEY -1975
-LISTING BY F.J.WOJCIK MARCH, 1986
FOR DATA SET (AFISH75.XCD)

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
01/13	R	P00941	A001	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00923	A002	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00912	A003	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P0090	A004	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00892	A005	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00881	A006	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00871	A007	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00853	A008	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00833	A009	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00832	A010	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00813	A011	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00803	A012	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P0079	A013	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00782	A014	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P0077	A015	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00752	A016	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00733	A017	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00731	A018	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00712	A019	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00702	A020	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00691	A021	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P0068	A022	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P00663	A023	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/13	R	P0066	A024	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	P00633	A025	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	P00623	A026	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	P0062	A027	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	P00602	A028	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	P0059	A029	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	P00582	A030	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	P00571	A031	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	P00552	A032	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	P0054	A033	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	P00532	A034	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	P00521	A035	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	P00502	A036	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
01/14	R	PO0491	A037	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	PO0472	A038	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	PO0463	A039	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/14	R	PO0452	A040	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0191	A041	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0181	A042	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0161	A043	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0152	A044	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0142	A045	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO013	A046	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0122	A047	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO010	A048	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0091	A049	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0071	A050	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0071	A051	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO006	A052	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0043	A053	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0023	A054	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0021	A055	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO001	A056	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0181	A057	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0142	A058	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0072	A059	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/15	R	PO0021	A060	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/15	F	PO000	A440	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/15	F	PO005	A441	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/15	F	PO010	A442	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/15	F	PO015	A443	LA	33	W	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/15	F	PO020	A444	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/15	F	PO002	A445	BR	35	A	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/15	F	PO003	A446	BR	35	W	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/15	F	PO004	A447	BR	35	W	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/15	F	PO001	A448	BR	35	A	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/16	F	PO045	A449	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/16	F	PO050	A450	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/16	F	PO055	A451	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/16	F	PO060	A452	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
09/16	F	PO065	A453	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/16	F	PO070	A454	LA	33	W	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/16	F	PO075	A455	LA	33	W	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/16	F	PO080	A456	LA	33	W	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/16	F	PO085	A457	LA	33	W	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/16	F	PO090	A458	LA	33	W	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/16	F	PO094	A459	LA	33	W	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/16	F	PO001	A460	BR	35	A	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/16	F	PO002	A461	BR	35	A	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/16	F	PO003	A462	BR	35	A	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/22	F	PO002	A463	BR	35	A	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/22	F	PO001	A464	BR	35	A	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/22	F	PO001	A465	BR	35	A	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/22	F	PO002	A466	BR	35	A	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/22	F	PO003	A467	BR	35	A	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/22	F	PO004	A468	BR	35	A	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/23	F	PO001	A469	BR	35	W	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/23	F	PO002	A470	BR	35	W	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/23	F	PO003	A471	BR	35	W	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/23	F	PO004	A472	BR	35	W	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/23	F	PO005	A473	BR	35	A	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"
09/23	F	PO006	A474	BR	35	A	05	24"X12"	NO	UNK	16'SB	1-1/2"	N L	1/2"	1-1/4"

VIMS ICHTHYOLOGY TRAWL SURVEY -1976
-LISTING BY F.J.WOJCIK MARCH, 1986
FOR DATA SET (AFISH76.XCD)

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
01/28	R	PO0033	A145	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/28	R	PO0063	A146	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/28	R	PO0111	A147	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/28	R	PO017	A148	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0452	A149	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0463	A150	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0473	A151	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0493	A152	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0503	A153	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO052	A154	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0523	A155	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0542	A156	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0553	A157	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0563	A158	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0573	A159	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0583	A160	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO061	A161	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0612	A162	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0632	A163	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0641	A164	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO065	A165	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0671	A166	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0682	A167	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO069	A168	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0702	A169	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0712	A170	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0723	A171	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0742	A172	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO075	A173	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0763	A174	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO078	A175	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0783	A176	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0801	A177	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0821	A178	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0823	A179	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0843	A180	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO085	A181	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
01/29	R	PO0862	A182	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO088	A183	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/29	R	PO0892	A184	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/30	R	PO090	A185	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/30	R	PO0902	A186	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/30	R	PO0923	A187	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
01/30	R	PO0941	A188	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO019	A189	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO0181	A190	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO0163	A191	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO0151	A192	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO0143	A193	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO0131	A194	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO0112	A195	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO011	A196	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO0092	A197	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO0072	A198	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO0062	A199	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO005	A200	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO0042	A201	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO0023	A202	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO0012	A203	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
02/04	R	PO0003	A204	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"

VIMS ICHTHYOLOGY TRAWL SURVEY -1977
-LISTING BY F.J.WOJCIK MARCH, 1986
FOR DATA SET (AFISH78.XCD)

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
03/14	R	P00006	I153	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
03/14	R	P00328	I154	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
03/14	R	P00344	I155	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
03/14	R	P00898	I156	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
03/14	R	P00896	I157	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
03/14	R	P00913	I158	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
03/14	R	P00954	I159	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
03/14	R	P00964	I160	LA	33	A	05	48"X22"	NO	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"

VIMS ICHTHYOLOGY TRAWL SURVEY -1978
-LISTING BY F.J.WOJCIK MARCH, 1986
FOR DATA SET (AFISH78.XCD)

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
01/09	R	PO0232	I001	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/09	R	PO0223	I002	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/09	R	PO0213	I003	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/09	R	PO0212	I004	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO0171	I005	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO0818	I006	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO0809	I007	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO0808	I008	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO1386	I009	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO1384	I010	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO1390	I011	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO1392	I012	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO1368	I013	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO1366	I014	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO0753	I015	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO1362	I016	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO1595	I017	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO0748	I098	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO1588	I019	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/11	R	PO1587	I020	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO0668	I021	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO0629	I022	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO0626	I023	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO0663	I024	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO0622	I025	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO0610	I026	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO0596	I027	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1347	I028	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1346	I029	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1341	I030	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1340	I031	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO0508	I032	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1572	I033	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1570	I034	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO0109	I035	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1563	I036	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1555	I037	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1536	I038	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1526	I039	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1510	I040	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
01/12	R	PO0470	I041	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1494	I042	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1491	I043	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1468	I044	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1463	I045	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
01/12	R	PO1458	I046	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO1407	I285	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO1415	I286	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO1202	I287	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO1429	I288	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO1221	I289	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO1232	I290	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO1233	I291	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0307	I277	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0311	I278	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0899	I279	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0904	I280	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0902	I281	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0927	I282	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0948	I283	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0961	I284	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0363	I292	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0516	I293	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0521	I294	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0125	I295	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0123	I296	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0118	I297	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
02/28	R	PO0498	I298	LA	33	A	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
03/01	R	PO0116	I299	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
03/01	R	PO0433	I300	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
03/01	R	PO0429	I301	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
03/01	R	PO0050	I302	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
03/01	R	PO0999	I303	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
03/01	R	PO0984	I304	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
03/01	R	PO0968	I305	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
03/01	R	PO0956	I306	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
03/01	R	PO0018	I307	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"
03/01	R	PO0333	I308	LA	33	W	25	48"X22"	NO	30'	30'SB	1-1/2	N L	1/2"	1 1/4"

VIMS ICHTHYOLOGY TRAWL SURVEY -1979
-LISTING BY F.J.WOJCIK MARCH, 1986
FOR DATA SET (AFISH79.XCD)

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
06/14	F	P0005	I546	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
06/14	F	P0005	I547	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
06/14	F	P0010	I548	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
06/14	F	P0010	I549	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
06/14	F	P0015	I550	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
06/14	F	P0015	I551	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
06/14	F	P0020	I552	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
06/14	F	P0020	I553	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
06/13	F	P0025	I554	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
06/13	F	P0025	I555	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
07/11	F	P0005	I596	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
07/11	F	P0005	I597	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
07/11	F	P0015	I600	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
07/11	F	P0015	I601	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
07/11	F	P0020	I602	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
07/11	F	P0020	I603	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
07/11	F	P0025	I604	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
07/11	F	P0025	I605	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
08/11	F	P0010	I598	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
08/11	F	P0010	I599	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
08/09	F	P0005	I638	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
08/09	F	P0005	I639	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
08/09	F	P0010	I640	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
08/09	F	P0010	I641	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
08/09	F	P0015	I642	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
08/09	F	P0015	I643	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
08/09	F	P0020	I644	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
08/09	F	P0020	I645	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
08/09	F	P0025	I646	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
08/09	F	P0025	I647	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
09/17	F	PO010	I680	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/17	F	PO005	I681	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/17	F	PO025	I682	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/17	F	PO020	I683	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
09/17	F	PO026	I684	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
10/18	F	PO011	I725	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
10/18	F	PO009	I726	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
10/18	F	PO008	I727	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
10/18	F	PO005	I728	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
10/18	F	PO005	I729	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
10/18	F	PO013	I730	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
10/18	F	PO017	I731	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
10/18	F	PO019	I732	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
10/18	F	PO020	I733	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
10/18	F	PO021	I734	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
11/27	F	PO004	I772	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
11/27	F	PO005	I773	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
11/27	F	PO007	I774	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
11/27	F	PO008	I775	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
11/27	F	PO010	I776	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
11/27	F	PO006	I777	PA	68	A	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
11/27	F	PO020	I778	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"
11/27	F	PO026	I779	PA	68	W	05	54"X25"	YES	30'	30'SB	1-1/2"	N L	1/2"	1-1/4"

VIMS ICHTHYOLOGY TRAWL SURVEY -1981
-LISTING BY F.J.WOJCIK FEBRUARY, 1986
FOR DATA SET (AFISH81.XCD)

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
03/10	R	PO1587	I092	JS	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/10	R	PO1596	I093	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/10	R	PO1379	I095	JS	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/10	R	PO1386	I096	JS	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/10	R	PO0761	I094	JS	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/10	R	PO0818	I097	JS	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/10	R	PO0824	I098	JS	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/10	R	PO0836	I099	JS	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/11	R	PO1341	I101	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/11	R	PO1576	I102	JS	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/11	R	PO1556	I103	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/11	R	PO1454	I104	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/11	R	PO1447	I105	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/11	R	PO1427	I106	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/11	R	PO1411	I107	JS	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/11	R	PO0639	I100	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/11	R	PO0995	I108	JS	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/11	R	PO0968	I109	JS	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"

VIMS ICHTHYOLOGY TRAWL SURVEY -1982
-LISTING BY F.J.WOJCIK FEBRUARY, 1986
FOR DATA SET (AFISH82.XCD)

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
02/11	R	PO1407	I060	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/11	R	PO1415	I061	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/11	R	PO1443	I062	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/11	R	PO1476	I063	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/11	R	PO1485	I064	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/11	R	PO1524	I065	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/11	R	PO1547	I066	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/11	R	PO1563	I067	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/11	R	PO1570	I068	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/11	R	PO1339	I069	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/11	R	PO1343	I070	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/12	R	PO1386	I073	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/12	R	PO1383	I074	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/12	R	PO1381	I075	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/12	R	PO1377	I076	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/12	R	PO1594	I077	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/12	R	PO1588	I078	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/12	R	PO0831	I071	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
02/12	R	PO0025	I072	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/17	R	PO1588	I141	JS	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/17	R	PO1595	I142	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/17	R	PO1387	I145	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/17	R	PO1392	I146	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/17	R	PO0770	I143	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/17	R	PO0794	I144	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/17	R	PO0823	I147	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/17	R	PO0831	I148	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/18	R	PO0678	I149	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/18	R	PO1350	I150	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/18	R	PO1561	I151	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/18	R	PO1547	I152	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/18	R	PO1527	I153	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/18	R	PO1272	I154	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/18	R	PO1473	I155	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/18	R	PO1438	I156	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
03/18	R	P01431	I157	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
03/18	R	P00957	I158	JS	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0046	I349	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0050	I350	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0051	I351	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0055	I352	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0056	I353	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0060	I354	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0065	I355	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0065	I356	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0025	I357	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0020	I358	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0020	I359	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0016	I360	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0015	I361	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0016	I362	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0010	I363	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0006	I364	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0005	I365	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
07/21	F	P0000	I366	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"

VIMS ICHTHYOLOGY TRAWL SURVEY -1983
-LISTING BY F.J.WOJCIK MARCH, 1986
FOR DATA SET (AFISH83.XCD)

MO/DA	F R	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
12/06	F	PO045	I439	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/06	F	PO045	I440	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/06	F	PO050	I441	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/06	F	PO050	I442	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/06	F	PO055	I443	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/06	F	PO055	I444	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/06	F	PO060	I445	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/06	F	PO060	I446	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/08	F	PO025	I447	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/08	F	PO025	I448	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/08	F	PO020	I449	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/08	F	PO025	I450	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/08	F	PO020	I451	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/08	F	PO015	I452	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/08	F	PO015	I453	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/08	F	PO010	I454	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/08	F	PO010	I455	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/08	F	PO005	I456	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/08	F	PO005	I457	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"

VIMS ICHTHYOLOGY TRAWL SURVEY -1984
-LISTING BY F.J.WOJCIK MARCH, 1986
FOR DATA SET (AFISH84.XCD)

MO/DA	FR	SAMPL SITE	COLL NOS.	VS CD	GR CD	W A	TOW TIM	DOOR SIZE	TICK CHAN	BDL LGT	TRAWL TYPE	BODY MESH	THD TYP	LINER MESH	BAG MESH
12/19	F	PO045	I455	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/19	F	PO047	I456	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/19	F	PO053	I457	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/19	F	PO055	I458	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/19	F	PO056	I459	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/19	F	PO057	I460	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/19	F	PO062	I461	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/19	F	PO065	I462	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/19	F	PO047	I463	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/19	F	PO045	I464	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/20	F	PO025	I465	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/20	F	PO023	I466	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/20	F	PO020	I467	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/20	F	PO019	I468	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/20	F	PO014	I469	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/20	F	PO014	I470	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/20	F	PO011	I471	03	70	W	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/20	F	PO010	I472	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/20	F	PO006	I473	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/20	F	PO003	I474	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"
12/20	F	PO002	I475	03	70	A	05	54"X25"	YES	60'	30'SB	1-1/2"	N L	1/4"	1-1/4"

APPENDIX A

VESSEL CODES USED IN THE VIMS TRAWL SURVEY

Alpha Code	Numeric Code	Vessel Name	OAL	Hull	Type
BR	07	W.K.Brooks	30'	Wood	Launch
EM		Edith Mae	26'	Wood	Launch
IN		Investigator	28'	Wood	Launch
IV		Irma Virginia	65'	Wood	Trawler
JA		Judith Ann		FGlass	Launch
JS	03	Captain John Smith	42'	FGlass	Launch
	17	Langley II	44'	FGlass	Launch
LA	02	Langley	80'	Steel	Ferry Boat
OB		Observer	27'	Wood	Launch
PA	01	Pathfinder	55'	Wood	Trawler
RE	05	Restless	36'	Wood	Launch
SJ	15	Sally Jean		Wood	Launch
TD	13	Three Daughters		Wood	Launch
VL	06	Virginia Lee	35'	Wood	Launch
	18	Capt John Smith New	42'	FGlass	Launch *

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* Code 18 refers to Capt. John Smith with a new larger engine, and increased power.

APPENDIX B DESCRIPTION OF 30' SEMI-BALLOON TRAWL, SHOWING CHANGES WITH TIME

1955-1960 (Gear Code 82).

31' headrope, 37' footrope.
Body and wings mesh 1" stretched, #9 thread cotton.
Bag mesh 3/4" stretched, #9 or #12 thread cotton.
Net hung on 7/16" Italian hemp net rope, legs at 8' with wire rope thimbels, 3/16", spliced at each end.
Chain on footrope, 2/0 galvanized.
Headrope with three 5" x 9" plastic floats, set 3' apart.
Net tarred
Door probably with dimensions and rigging as described for 1962-1963 doors.
Body and bag meshes were described by W.H. Massmann (1962).
Bridle length unrecorded, but probably 30'

1961 (Gear Code 10).

Specifications are the same as above, except for the following which were described by the net maker S. J. Marinovich in 1963:
Bag mesh 1-1/2", #15 thread cotton.
Net legs at 6'.
Headrope with 6-1/2" floats.
Net copper treated.

1962-1963 (Gear Code 10).

Specifications are the same as for 1961, except for the following:
Bag mesh 1" or 1-1/2", #18 thread cotton.
Footrope wire rope, with chain hung loop style, 16 links to 12 inches.
Headrope with ARK sponge floats.
Nets treated with green copper naphthenate.
Doors 48" x 22" made of 1-inch pine. 1-1/4" x 1/4" straps and braces, 3/8" x 2-1/2" bottom shoe runner, 3/16" galvanized chain, 3/8" swivel.

1964-1972 (Gear Code 10).

Specifications are the same as for 1962-1963, except for the following:
Nylon and cotton thread nets were in use in midsummer, and the poor condition suggests that nylon thread was introduced at least in 1964.
Bag mesh 1-1/4" mesh.

1973 (Gear Code 43).

Specifications are the same as for 1964-1972, except for the following:
Tickler chain added.

1973-1980 (Gear Code 33).

Specifications are the same as for 1964-1972, except for the following:
Liner with a 1/2" stretch mesh added.
Net hung on 7/16" polyethylene dacron (poly Dac) rope.
Headrope with six 3" x 2-1/2" ARK floats, 3' apart, centered 6' from the ends.
Without tickler chain.

1979 (Gear Code 68).

Specifications are the same as for 1973-1980, except for the following:
Doors 54 x 24" made of 1-inch pine, otherwise the same as the doors used in 1962-1963.
Tickler chain added to footrope.

1980-1984 (Gear Code 70)

Specifications are the same as for 1979-1980, except bridle cable length was increased to 60'.
With tickler chain.

1984 (Gear Code 80)

Specifications same as above, except without tickler chain.
Used only when tickler chain broke.

1984 (Gear Code 81)

Same Gear 70 above, but with 90' bridle; used just once.

Disclaimer

The above gear documentation includes the best information available; however, information at best is very meagre. Variations, especially as to the introduction and use of nylon instead of cotton were inadequately documented. Gear types 33 and 43 were used during the transition period from cotton to nylon.

APPENDIX C DESCRIPTION OF 16' SEMI-BALLOON TRAWL, SHOWING CHANGES WITH TIME

1971-1980 (Gear Code 35).

16' headrope, 20' footrope.
Body mesh 1-1/2" stretched, #9 thread cotton.
Bag mesh 1-1/4" stretched, #15 thread nylon with innerliner of 1/2" #208 nylon fine yarn netting.
Net hung on 3/8" poly-dac net, legs extend from net 3' with wire rope thimbels spliced at each end and shackles attached to fasten to doors.
1/8" galvanized chain on footrope, loop style.
ARK floats on headrope.
Net treated with green naphthenate net preservative.
Doors 24" in length and 12" in width, made of 1-inch mahogany lumber, straps and braces of 1 X 1/4" mild steel, bottom shoe runner of 3/8" x 2" mild steel, doors bridled with 2/0 galvanized, with one 5/16" steel swivel at head of each bridle.

Disclaimer

The above gear documentation includes the best information available; however, information at best is very meager. Variations, especially as to the introduction and use of nylon instead of cotton were inadequately documented. Gear types 33 and 43 were used during the transition period from cotton to nylon.

APPENDIX D FIXED POTOMAC RIVER STATIONS WITH THEIR LATITUDES AND LONGITUDES

SAMPLE SITE	LAT/LOMG	SAMPLE SITE	LAT/LONG
P0000	37577 76168	P0060	38233 77156
P0001	37583 76179	P0061	38245 77162
P0002	37576 76200	P0062	38254 77161
P0003	37597 76200	P0063	38264 77163
P0004	38000 76209	P0064	38274 77165
P0005	38006 76218	P0065	38283 77165
P0006	38013 76228	P0066	38295 77167
P0007	38018 76247	P0067	38306 77164
P0008	38024 76249	P0068	38314 77164
P0009	38030 76259	P0069	38323 77158
P0010	38036 76268	P0070	38330 77152
P0011	38041 76278	P0071	38336 77143
P0012	38044 76291	P0072	38351 77126
P0013	38050 76301	P0073	38352 77126
P0014	38057 76312	P0074	38359 77118
P0015	38062 76322	P0075	38366 77106
P0016	38068 76330	P0076	38376 77094
P0017	38086 76327	P0077	38369 77081
P0018	38085 76346	P0078	38388 77078
P0019	38093 76355	P0079	38387 77077
P0020*	38100 76365	P0080	38399 77050
P0045	38230 77000	P0081	38407 77076
P0046	38242 77007	P0082	38415 77064
P0047	38245 77025	P0083	38419 77055
P0048	38245 77031	P0084	38419 77043
P0049	38243 77043	P0085	38422 77031
P0050	38237 77050	P0086	38430 77021
P0051	38235 77067	P0087 **	
P0052	38233 77081	P0088	38449 77022
P0053	38225 77088	P0089	38459 77022
P0054	38225 77088	P0090	38469 77022
P0055	38215 77106	P0091	38479 77022
P0056	38211 77121	P0092	38497 77019
P0057	38214 77139	P0093	38499 77017
P0058	38218 77145	P0094	38509 77014
P0059	38226 77152		

* Potomac not sampled between mile 20 and mile 45.
** Station not made

APPENDIX E SPECIAL 1975 AND 1976 POTOMAC RIVER RANDOM STATIONS

SAMPLE SITE	1975 Data LAT	1975 Data LONG	1976 Data LAT	1976 Data LONG
P00003			37582	76172
P0001	37580	76179		
P00021	37587	76192		
P00012			37587	76179
P00023	37589	76196	37595	76190
P00033			38014	76190
P00042			38007	76208
P0005			38011	76213
P0006	38010	76230		
P00062			38010	76229
P00063			38032	76270
P00071	38018	76247		
P00072	38006	76257	38024	76239
P00091	38030	76266		
P00092			38037	76260
P0010	38033	76271		
P0011			38041	76280
P00111			38057	76270
P00112			38044	76285
P00122	38044	76291		
P0013	38050	76301		
P00131			38055	76310
P00141	38051	76325		
P00142	38060	76316		
P00143			38063	76318
P00151			38069	76321
P00152	38067	76326		
P00161	38071	76333		
P00163			38088	76333
P0017			38086	76327
P00181*	38088	76341	38090	76343
P00181*	38084	76355		
P0019			38098	76351
P00191	38236	77004		
P00452	38236	77004	38237	77001
P00463	38244	77016	38245	77014
P00472	38243	77025		
P00473			38245	77027
P00491	38240	77046		
P00493			38238	77051
P00502	38236	77061		
P00503			38236	77066

* Stations have duplicate numbers.

	1975 Data		1976 Data	
SAMPLE SITE	LAT	LONG	LAT	LONG
P0052			38233	77078
P00521	38233	77081		
P00523			38228	77086
P00532	38225	77094		
P0054	38222	77099		
P00542			38217	77012
P00552	38215	77116		
P00553			38212	77117
P00563			38212	77130
P00571	38214	77139		
P00573			38216	77140
P00582	38223	77150		
P00583			38223	77149
P0059	38227	77153		
P00602	38254	77161		
P0061			38243	77161
P00612			38248	77161
P0062	38254	77161		
P00623	38261	77161		
P00632			38259	77163
P00633	38272	77163		
P00641			38276	77164
P0065			38284	77165
P0066	38301	77166		
P0063	38313	77163		
P00671			38306	77164
P0068	38313	77163		
P00682			38318	77162
P0069			38322	77158
P00691	38325	77155		
P00702	38334	77145	38332	77144
P00712	38355	77127	38351	77126
P00723			38351	77126
P00731	38387	77117		
P00733	38365	77098		
P00742			38363	77110
P0075			38364	77105
P00752	38365	77098		
P00763			38368	77083
P0077	38369	77081		
P0078			38380	77074
P00782	38386	77076		
P00783			38380	77074
P0079	38386	77076		

	1975 Data		1976 Data	
SAMPLE SITE	LAT	LONG	LAT	LONG
P00801			38399	77080
P00803	38404	77077		
P00813	38412	77069		
P00821			38414	77064
P00823			38415	77057
P00832	38418	77048		
P00833	38418	77044		
P00843			38421	77034
P0085			38422	77030
P00853	38427	77023		
P00862			38436	77020
P00871	38441	77021		
P0088			38449	77023
P00881	38452	77022		
P00892	38464	77020	38463	77020
P0090	38467	77021	38468	77021
P00902			38473	77017
P00912	38484	77021		
P00923	38497	77019	38496	77018
P00941	38512	77015	38511	77013

APPENDIX F

LISTING OF POTOMAC RIVER RANDOM STATIONS WITH LATITUDES AND LONGITUDES BY COLOR STRATA

POTOMAC GREEN STRATUM (12'-19')

SAMPLE SITE	LAT	LONG
P00001G	375446	761507
P00002G	375451	761530
P00003G	375504	761548
P00004G	375506	761606
P00005G	375532	761705
P00006G	375546	761719
P00007G	375559	761748
P00008G	375606	761806
P00009G	375616	761826
P00010G	375631	761902
P00011G	375651	761920
P00012G	375707	761937
P00013G	375721	762000
P00014G	375733	762004
P00015G	375736	762020
P00016G	375752	762021
P00017G	375753	762038
P00018G	375805	762038
P00019G	375807	762059
P00020G	375807	762118
P00021G	375807	762138
P00022G	375807	762157
P00023G	375807	762214
P00024G	375804	762235
P00025G	375756	762235
P00026G	375804	762255
P00027G	375756	762255
P00028G	375805	762315
P00029G	375807	762333
P00030G	375821	762352
P00031G	375836	762415
P00032G	375853	762415
P00033G	375906	762415
P00034G	375853	76243300

POTOMAC GREEN STRATUM (12'-19')

SAMPLE SITE	LAT	LONG
P00035G	375906	762433
P00036G	375922	762433
P00037G	375922	762453
P00038G	375936	762453
P00039G	375936	762512
P00040G	375936	762530
P00041G	375939	762530
P00042G	375940	762550
P00043G	375951	762550
P00044G	375953	762611
P00045G	380008	762611
P00046G	380009	762629
P00047G	380022	762629
P00048G	380011	762652
P00049G	375952	762713
P00050G	380008	762713
P00051G	380020	762713
P00052G	380110	762709
P00053G	380110	762650
P00054G	380108	762630
P00055G	380120	762630
P00056G	380122	762650
P00057G	380138	762650
P00058G	380122	762709
P00059G	380138	762709
P00060G	380154	762725
P00061G	380138	762725
P00062G	380122	762725
P00063G	380122	762748
P00064G	380145	762805
P00065G	380122	762805
P00066G	380141	762820
P00067G	380125	762820

SAMPLE SITE	LAT	LONG
P00068G	380138	762840
P00069G	380125	762840
P00070G	380136	762903
P00071G	380137	762920
P00072G	380141	762940
P00073G	380144	763000
P00074G	380152	762920
P00075G	380207	762920
P00076G	380209	762940
P00077G	380210	763000
P00078G	380223	762940
P00079G	380220	763000
P00080G	380237	763000
P00081G	380424	762157
P00082G	380414	762157
P00083G	380325	762214
P00084G	380340	762235
P00085G	380410	762255
P00086G	380426	762255
P00087G	380456	762333
P00088G	380528	762453
P00089G	380514	762453
P00090G	380528	762709
P00091G	380543	762725
P00092G	380632	763445
P00093G	380644	763445
P00094G	380700	763445
P00095G	380716	763445
P00096G	380632	763505
P00097G	380644	763505
P00098G	380700	763505
P00099G	380716	763505
P00100G	380734	763505
P00101G	380746	763505
P00102G	380700	763524

SAMPLE SITE	LAT	LONG
P00103G	380716	763524
P00104G	380734	763524
P00105G	380746	763524
P00106G	380803	763524
P00107G	380816	763524
P00108G	380803	763542
P00109G	380819	763542
P00110G	380834	763542
P00111G	380850	763542
P00112G	380818	763603
P00113G	380834	763603
P00114G	380850	763251
P00115G	380906	763215
P00116G	380951	763309
P00117G	380922	763839
P00118G	380850	763858
P00119G	380906	763858
P00120G	380922	763858
P00121G	380850	763918
P00122G	380906	763918
P00123G	380921	763918
P00124G	381357	764153
P00125G	381345	764153
P00126G	381345	764212
P00127G	382321	770050
P00128G	382337	770107
P00129G	382353	770122
P00130G	382409	770146
P00131G	382323	770403
P00132G	382312	770517
P00133G	382310	770534
P00134G	382253	770554
P00135G	382253	770613
P00136G	383353	770631
P00137G	382246	770632

SAMPLE SITE	LAT	LONG
P00138G	382241	770653
P00139G	382237	770707
P00140G	382354	770709
P00141G	382027	771327
P00142G	382027	771345
P00143G	382027	771404
P00144G	382039	771406
P00145G	382042	771424
P00146G	382054	771426
P00147G	382044	771439
P00148G	382055	771442
P00149G	382108	771442
P00150G	382108	771500
P00151G	382122	771500
P00152G	382122	771520
P00153G	382142	771522
P00154G	382140	771539
P00155G	382140	771556
P00156G	382155	771557
P00157G	382210	771614
P00158G	382223	771614
P00159G	382223	771634
P00160G	382137	771344
P00161G	382156	771405
P00162G	382210	771424
P00163G	382154	771420
P00164G	382240	771614
P00165G	382241	771644
P00166G	382241	771653
P00167G	382241	771711
P00168G	382254	771614
P00169G	382254	771634
P00170G	382254	771653
P00171G	382254	771711
P00172G	382254	771728

SAMPLE SITE	LAT	LONG
P00173G	382309	771614
P00174G	382309	771634
P00175G	382309	771653
P00176G	382309	771711
P00177G	382309	771728
P00178G	382324	771614
P00179G	382324	771634
P00180G	382324	771653
P00181G	382324	771711
P00182G	382324	771728
P00183G	382339	771634
P00184G	382339	771653
P00185G	382339	771711
P00186G	382339	771728
P00187G	382339	771747
P00188G	382354	771634
P00189G	382354	771653
P00190G	382354	771711
P00191G	382354	771728
P00192G	382354	771747
P00193G	382408	771634
P00194G	382408	771653
P00195G	382408	771711
P00196G	382408	771728
P00197G	382408	771747
P00198G	382425	771634
P00199G	382425	771653
P00200G	382425	771711
P00201G	382425	771728
P00202G	382425	771747
P00203G	382437	771650
P00204G	382437	771711
P00205G	382437	771728
P00206G	382437	771747
P00207G	382453	771650

SAMPLE SITE	LAT	LONG
P00208G	382453	771711
P00209G	382453	771728
P00210G	382453	771747
P00211G	382506	771650
P00212G	382506	771711
P00213G	382506	771728
P00214G	382506	771747
P00215G	382523	771650
P00216G	382523	771711
P00217G	382523	771728
P00218G	382523	771747
P00219G	382537	771650
P00220G	382537	771711
P00221G	382537	771728
P00222G	382537	771747
P00223G	382550	771650
P00224G	382550	771711
P00225G	382550	771728
P00226G	382550	771747
P00227G	382606	771650
P00228G	382606	771711
P00229G	382606	771728
P00230G	382606	771747
P00231G	382621	771650
P00232G	382621	771711
P00233G	382621	771728
P00234G	382621	771747
P00235G	382634	771650
P00236G	382634	771711
P00237G	382634	771728
P00238G	382634	771747
P00239G	382647	771650

SAMPLE SITE	LAT	LONG
P00240G	382647	771711
P00241G	382647	771728
P00242G	382647	771747
P00243G	382647	771804
P00244G	382704	771650
P00245G	382704	771711
P00246G	382704	771728
P00247G	382704	771747
P00248G	382704	771804
P00249G	382720	771650
P00250G	382720	771711
P00251G	382720	771728
P00252G	382720	771747
P00253G	382720	771804
P00254G	382734	771650
P00255G	382734	771711
P00256G	382734	771728
P00257G	382734	771747
P00258G	382734	771804
P00259G	382747	771650
P00260G	382747	771711
P00261G	382747	771728
P00262G	382747	771747
P00263G	382747	771804
P00264G	382805	771711
P00265G	382605	771728
P00266G	382805	771747
P00267G	382805	771804
P00268G	382820	771711
P00269G	382820	771728
P00270G	382820	771747
P00271G	382820	771804

POTOMAC BLUE STRATUM (20'-29')

SAMPLE SITE	LAT	LONG
P00301B	375547	761549
P00302B	375533	761549
P00303B	375519	761551
P00304B	375603	761609
P00305B	375547	761609
P00306B	375535	761609
P00307B	375633	761629
P00308B	375619	761629
P00309B	375603	761629
P00310B	375547	761629
P00311B	375633	761647
P00312B	375619	761647
P00313B	375603	761647
P00314B	375547	761647
P00315B	375649	761705
P00316B	375633	761705
P00317B	375619	761705
P00318B	375603	761705
P00319B	375649	761725
P00320B	375633	761725
P00321B	375619	761725
P00322B	375649	761747
P00323B	375633	761747
P00324B	375619	761747
P00325B	375705	761806
P00326B	375649	761806
P00327B	375633	761806
P00328B	375619	761806
P00329B	375705	761825
P00330B	375649	761825
P00331B	375633	761825
P00332B	375717	761845
P00333B	375705	761845
P00334B	375649	761845
P00335B	375636	761845

POTOMAC BLUE STRATUM (20'-29')

SAMPLE SITE	LAT	LONG
P00336B	375719	761904
P00337B	375705	761904
P00338B	375651	761904
P00339B	375731	761923
P00340B	375719	761923
P00341B	375705	761923
P00342B	375733	761942
P00343B	375721	761939
P00344B	380138	761942
P00345B	380209	762000
P00346B	380225	762000
P00347B	380238	762020
P00348B	380225	762020
P00349B	380340	762255
P00350B	380355	762315
P00351B	380345	762311
P00352B	380426	762633
P00353B	380410	762633
P00354B	380400	762633
P00355B	380456	762415
P00356B	380442	762415
P00357B	380442	762352
P00358B	380426	762352
P00359B	380512	762433
P00360B	380528	762433
P00361B	380456	762453
P00362B	380446	762453
P00363B	380528	762512
P00364B	380515	762512
P00365B	380528	762530
P00366B	380545	762550
P00367B	380528	762550
P00368B	380526	762050

SAMPLE SITE	LAT	LONG
P00369B	380512	762650
P00370B	380512	762725
P00371B	380528	762748
P00372B	380743	763039
P00373B	380733	763039
P00374B	380759	763056
P00375B	380759	763115
P00376B	375836	762059
P00377B	375821	762059
P00378B	375853	762118
P00379B	375836	762118
P00380B	375853	762138
P00381B	375836	762138
P00382B	375853	762157
P00383B	375836	762157
P00384B	375824	762157
P00385B	375853	762214
P00386B	375836	762214
P00387B	375823	762214
P00388B	375906	762235
P00389B	375853	762235
P00390B	375836	762235
P00391B	375821	762235
P00392B	375853	762255
P00393B	375836	762255
P00394B	375821	762255
P00395B	375853	762315
P00396B	375836	762315
P00397B	375821	762315
P00398B	375906	762333
P00399B	375853	762333
P00400B	375836	762333
P00401B	375823	762333
P00402B	375922	762352
P00403B	375906	762352
P00404B	375853	762352
P00405B	375836	762352
P00406B	375936	762415
P00407B	375951	762433
P00408B	380022	762453
P00409B	380008	762453
P00410B	375951	762453
P00411B	380036	762453
P00412B	380022	762453
P00413B	380008	762453
P00414B	375955	762453
P00415B	380108	762530
P00416B	380054	762530
P00417B	380037	762530
P00418B	380022	762530
P00419B	380008	762530
P00420B	380108	762550
P00421B	380054	762550
P00422B	380037	762550
P00423B	380022	762550
P00424B	380010	762550
P00425B	380108	762550
P00426B	380054	762550
P00427B	380037	762611
P00428B	380040	762611
P00429B	380024	762611
P00430B	380152	762611
P00431B	380138	762611
P00432B	380152	762630
P00433B	380143	762630
P00434B	380209	762650
P00435B	380152	762650
P00436B	380209	762709
P00437B	380209	762725
P00438B	380209	762748

SAMPLE SITE	LAT	LONG
P00439B	380152	762748
P00440B	380209	762805
P00441B	380152	762805
P00442B	380225	762820
P00443B	380209	762820
P00444B	380152	762820
P00445B	380225	762840
P00446B	380209	762840
P00447B	380152	762840
P00448B	380240	762903
P00449B	380225	762903
P00450B	380209	762903
P00451B	380152	762903
P00452B	380257	762920
P00453B	380240	762920
P00454B	380225	762920
P00455B	380310	762920
P00456B	380256	762940
P00457B	380240	762940
P00458B	380325	763000
P00459B	380310	763000
P00460B	380256	763000
P00461B	380340	763017
P00462B	380325	763017
P00463B	380310	763017
P00464B	380355	763039
P00465B	380340	763039
P00466B	380325	763039
P00467B	380313	763039
P00468B	380410	763056
P00469B	380355	763056
P00470B	380340	763056
P00471B	380325	763056
P00472B	380424	763115
P00473B	380410	763115

SAMPLE SITE	LAT	LONG
P00474B	380355	763115
P00475B	380340	763115
P00476B	380528	763232
P00477B	380512	763232
P00478B	380545	763255
P00479B	380528	763250
P00480B	380600	763315
P00481B	380545	763315
P00482B	380528	763315
P00483B	380627	763330
P00484B	380615	763330
P00485B	380600	763330
P00486B	380545	763330
P00487B	380645	763340
P00488B	380630	763340
P00489B	380615	763340
P00490B	380600	763340
P00491B	380732	763413
P00492B	380716	763413
P00493B	380702	763413
P00494B	380645	763413
P00495B	380630	763413
P00496B	380615	763413
P00497B	380803	763430
P00498B	380747	763430
P00499B	380732	763430
P00500B	380716	763430
P00501B	380702	763430
P00502B	380645	763430
P00503B	380816	763445
P00504B	380803	763445
P00505B	380834	763505
P00506B	380816	763505
P00507B	380903	763525
P00508B	380936	763623

SAMPLE SITE	LAT	LONG
P00509B	380936	763639
P00510B	380952	763658
P00511B	380936	763658
P00512B	380850	763313
P00513B	380904	763311
P00514B	380934	763330
P00515B	381006	763330
P00516B	381024	763330
P00517B	381040	763330
P00518B	381054	763330
P00519B	381024	763346
P00520B	381040	763346
P00521B	381054	763346
P00522B	381110	763346
P00523B	381024	763406
P00524B	381040	763406
P00525B	381054	763406
P00526B	381110	763406
P00527B	381040	763425
P00528B	381054	763425
P00529B	381127	763525
P00530B	381054	763446
P00531B	381110	763446
P00532B	381155	763446
P00533B	381110	763502
P00534B	381158	763502
P00535B	381113	763524
P00536B	381127	763542
P00537B	381127	763603
P00538B	381141	763603
P00539B	381141	763623
P00540B	381158	763623
P00541B	381211	763623
P00542B	381226	763623
P00543B	381141	763639

SAMPLE SITE	LAT	LONG
P00544B	381158	763639
P00545B	381211	763639
P00546B	381226	763639
P00547B	381241	763639
P00548B	381141	763658
P00549B	381158	763658
P00550B	381211	763658
P00551B	381226	763658
P00552B	381241	763658
P00553B	381158	763713
P00554B	381211	763713
P00555B	381226	763713
P00556B	381241	763713
P00557B	381211	763739
P00558B	381226	763739
P00559B	381241	763739
P00560B	381257	763739
P00561B	381211	763800
P00562B	381226	763800
P00563B	381241	763800
P00564B	381257	763800
P00565B	381211	763820
P00566B	381226	763820
P00567B	381241	763820
P00568B	381257	763820
P00569B	380936	763622
P00570B	380952	763622
P00571B	380936	763739
P00572B	380952	763739
P00573B	381006	763739
P00574B	381024	763739
P00575B	381040	763739
P00576B	381054	763739
P00577B	380936	763800
P00578B	380952	763800

SAMPLE SITE	LAT	LONG
P00579B	381006	763800
P00580B	381024	763800
P00581B	381040	763800
P00582B	381054	763800
P00583B	381110	763800
P00584B	381127	763800
P00585B	380952	763820
P00586B	381006	763820
P00587B	381024	763820
P00588B	381040	763820
P00589B	381054	763820
P00590B	381110	763820
P00591B	381127	763820
P00592B	381141	763820
P00593B	381158	763820
P00594B	380952	763839
P00595B	381006	763839
P00596B	381024	763839
P00597B	381040	763839
P00598B	381054	763839
P00599B	381110	763839
P00600B	381127	763839
P00601B	381141	763839
P00602B	381158	763839
P00603B	381211	763839
P00604B	381226	763839
P00605B	381241	763839
P00606B	380952	763858
P00607B	381006	763858
P00608B	381024	763958
P00609B	381040	763858
P00610B	381054	763858
P00611B	381110	763858
P00612B	381127	763858
P00613B	381141	763858

SAMPLE SITE	LAT	LONG
P00614B	381158	763858
P00615B	381211	763858
P00616B	381226	763858
P00617B	381241	763858
P00618B	381258	763858
P00619B	380952	763918
P00620B	381006	763918
P00621B	381024	763918
P00622B	381040	763918
P00623B	381054	763918
P00624B	381110	763918
P00625B	381127	763918
P00626B	381141	763918
P00627B	381158	763818
P00628B	381211	763918
P00629B	381226	763918
P00630B	381241	763918
P00631B	381258	763818
P00632B	380936	763935
P00633B	380952	763935
P00634B	381024	763935
P00635B	381040	763935
P00636B	381054	763935
P00637B	381110	763935
P00638B	381127	763935
P00639B	381141	763935
P00640B	381158	763935
P00641B	381211	763935
P00642B	381226	763935
P00643B	381241	763935
P00644B	381258	763935
P00645B	380952	763954
P00646B	381006	763954
P00647B	381024	763954
P00648B	381040	763954

SAMPLE SITE	LAT	LONG	SAMPLE SITE	LAT	LONG
P00649B	381054	763954	P00684B	381241	764034
P00650B	381110	763954	P00685B	381258	764034
P00651B	381127	763954	P00686B	381312	764034
P00652B	381141	763954	P00687B	381006	764052
P00653B	381158	763954	P00688B	381024	764052
P00654B	381211	763954	P00689B	381040	764052
P00655B	381226	763954	P00690B	381054	764052
P00656B	381241	763954	P00691B	381110	764052
P00657B	381258	763954	P00692B	381127	764052
P00658B	381312	763954	P00693B	381141	764052
P00659B	380952	764014	P00694B	381158	764052
P00660B	381006	764014	P00695B	381211	764052
P00661B	381024	764014	P00696B	381226	764052
P00662B	381040	764014	P00697B	381241	764052
P00663B	381054	764014	P00698B	381258	764052
P00664B	381110	764014	P00699B	381312	764052
P00665B	381127	764014	P00700B	381006	764112
P00666B	381141	764014	P00701B	381024	764112
P00667B	381158	764014	P00702B	381040	764112
P00668B	381211	764014	P00703B	381054	764112
P00669B	381226	764014	P00704B	381110	764112
P00670B	381241	764014	P00705B	381127	764112
P00671B	381258	764014	P00706B	381141	764112
P00672B	381312	764014	P00707B	381158	764112
P00673B	380952	764034	P00708B	381211	764112
P00674B	381006	764034	P00709B	381226	764112
P00675B	381024	764034	P00710B	381241	764112
P00676B	381040	764034	P00711B	381258	764112
P00677B	381054	764034	P00712B	381312	764112
P00678B	381110	764034	P00713B	381006	764133
P00679B	381127	764034	P00714B	381024	764133
P00680B	381141	764034	P00715B	381040	764133
P00681B	381158	764034	P00716B	381054	764133
P00682B	381211	764034	P00717B	381110	764133
P00683B	381226	764034	P00718B	381127	764133

SAMPLE SITE	LAT	LONG
P00719B	381141	764133
P00720B	381226	764133
P00721B	381241	764133
P00722B	381258	764133
P00723B	381312	764133
P00724B	381006	764153
P00725B	381024	764153
P00726B	381040	764153
P00727B	381054	764153
P00728B	381110	764153
P00729B	381127	764153
P00730B	381141	764153
P00731B	381241	764153
P00732B	381258	764153
P00733B	381312	764153
P00734B	381006	764212
P00735B	381024	764212
P00736B	381040	764212
P00737B	381055	764212
P00738B	381010	764212
P00739B	381117	764212
P00740B	381141	764212
P00741B	381258	764212
P00742B	381312	764212
P00743B	382324	770030
P00744B	382343	770047
P00745B	382351	770050
P00746B	382357	770103
P00747B	382409	770124
P00748B	382424	770146
P00749B	382422	770205
P00750B	382407	770308
P00751B	382357	770326
P00752B	382406	770324
P00753B	382355	770341

SAMPLE SITE	LAT	LONG
P00754B	382343	770400
P00755B	382353	770400
P00756B	382322	770416
P00757B	382323	770535
P00758B	382324	770555
P00759B	382343	770555
P00760B	382354	770553
P00761B	382327	770612
P00762B	382340	770612
P00763B	382354	770612
P00764B	382313	770628
P00765B	382326	770630
P00766B	382340	770630
P00767B	382354	770630
P00768B	382326	770645
P00769B	382340	770645
P00770B	382310	770707
P00771B	382326	770707
P00772B	382340	770707
P00773B	382310	770728
P00774B	382326	770728
P00775B	382340	770728
P00776B	382223	770747
P00777B	382237	770747
P00778B	382253	770747
P00779B	382313	770747
P00780B	382253	770807
P00781B	382237	770823
P00782B	382253	770823
P00783B	382156	770843
P00784B	382237	770843
P00785B	382253	770843
P00786B	382140	770901
P00787B	382156	770901
P00788B	382213	770901

SAMPLE SITE	LAT	LONG	SAMPLE SITE	LAT	LONG
P00789B	382223	770901	P00815B	382223	771500
P00790B	382240	770901	P00816B	382240	771500
P00791B	382125	770920	P00817B	382240	771520
P00792B	382143	770920	P00818B	382254	771520
P00793B	382155	770920	P00819B	382309	771539
P00794B	382213	770920	P00820B	382324	771539
P00795B	382223	770920	P00821B	382339	771557
P00796B	382108	770940	P00822B	382354	771557
P00797B	382156	770940	P00823B	382408	771557
P00798B	382210	770940	P00824B	382425	771614
P00799B	382055	771036	P00825B	382437	771614
P00800B	382055	771055	P00826B	382453	771614
P00801B	382042	771113	P00827B	382506	771614
P00802B	382042	771132	P00828B	382523	771614
P00803B	382042	771152	P00829B	382513	771614
P00804B	382042	771211	P00830B	382550	771614
P00805B	382042	771248	P00831B	382606	771614
P00806B	382055	771247	P00832B	382621	771614
P00807B	382042	771308	P00833B	382634	771614
P00808B	382042	771325	P00834B	382647	771614
P00809B	382108	771403	P00835B	382704	771614
P00810B	382122	771403	P00836B	382720	771634
P00811B	382137	771420	P00837B	382730	771634
P00812B	382154	771520	P00838B	382730	771634
P00813B	382210	771539	P00839B	382805	771634
P00814B	382210	771500	P00840B	382820	771634

POTOMAC WHITE STRATUM (30'-49')

SAMPLE SITE	LAT	LONG
PO0891W	375705	761647
PO0892W	375719	761705
PO0893W	375734	761705
PO0894W	375719	761725
PO0895W	375734	761725
PO0896W	375751	761725
PO0897W	375806	761725
PO0898W	375719	761747
PO0899W	375734	761747
PO0900W	375751	761747
PO0901W	375806	761747
PO0902W	375821	761747
PO0903W	375836	761747
PO0904W	375734	761806
PO0905W	375751	761806
PO0906W	375806	761806
PO0907W	375821	761806
PO0908W	375836	761806
PO0909W	375853	761806
PO0910W	375906	761806
PO0911W	375751	761825
PO0912W	375806	761825
PO0913W	375821	761825
PO0914W	375836	761825
PO0915W	375853	761825
PO0916W	375906	761825
PO0917W	375922	761825
PO0918W	375936	761825
PO0919W	375751	761845
PO0920W	375806	761845
PO0921W	375821	761845
PO0922W	375836	761845
PO0923W	375853	761845
PO0924W	375906	7618450
PO0925W	375922	7618450

POTOMAC WHITE STRATUM (30'-49')

SAMPLE SITE	LAT	LONG
PO0926W	375936	761845
PO0927W	375951	761845
PO0928W	380008	761845
PO0929W	375751	761904
PO0930W	375806	761904
PO0931W	375821	761904
PO0932W	375836	761904
PO0933W	375853	761904
PO0934W	375906	761904
PO0935W	375922	761904
PO0936W	375936	761904
PO0937W	375951	761904
PO0938W	380008	761904
PO0939W	380022	761904
PO0940W	375751	761923
PO0941W	375806	761923
PO0942W	375821	761923
PO0943W	375836	761923
PO0944W	375853	761923
PO0945W	375906	761923
PO0946W	375922	761923
PO0947W	375936	761923
PO0948W	375951	761923
PO0949W	380008	761923
PO0950W	380022	761923
PO0951W	380037	761923
PO0952W	375751	761942
PO0953W	375806	761942
PO0954W	375821	761942
PO0955W	375836	761942
PO0956W	375853	761942
PO0957W	375906	761942
PO0958W	375922	761942

SAMPLE SITE	LAT	LONG	SAMPLE SITE	LAT	LONG
P00959W	375936	761942	P00994W	375951	762059
P00960W	375951	761942	P00995W	380008	762059
P00961W	380008	761942	P00996W	380022	762059
P00962W	380022	761942	P00997W	375922	762118
P00963W	380036	761942	P00998W	375936	762118
P00964W	375806	762000	P00999W	375951	762118
P00965W	375821	762000	P01000W	380008	762118
P00966W	375836	762000	P01001W	380022	762118
P00967W	375853	762000	P01002W	380037	762118
P00968W	375906	762000	P01003W	375922	762138
P00969W	375922	762000	P01004W	375936	762138
P00970W	375936	762000	P01005W	375951	762138
P00971W	375951	762000	P01006W	380008	762138
P00972W	380008	762000	P01007W	380022	762138
P00973W	380034	762000	P01008W	380037	762138
P00974W	375821	762020	P01009W	375922	762157
P00975W	375836	762020	P01010W	375936	762157
P00976W	375853	762020	P01011W	375951	762157
P00977W	375906	762020	P01012W	380008	762157
P00978W	375922	762020	P01013W	380022	762157
P00979W	375936	762020	P01014W	380037	762157
P00980W	375951	762020	P01015W	380054	762157
P00981W	380008	762020	P01016W	375922	762214
P00982W	380022	762020	P01017W	375936	762214
P00983W	375836	762038	P01018W	375951	762214
P00984W	375853	762038	P01019W	380008	762214
P00985W	375906	762038	P01020W	380022	762214
P00986W	375922	762038	P01021W	380037	762214
P00987W	375936	762038	P01022W	380054	762214
P00988W	375951	762038	P01023W	375922	762235
P00989W	380008	762038	P01024W	375936	762235
P00990W	380022	762038	P01025W	375951	762235
P00991W	375906	762059	P01026W	380008	762235
P00992W	375902	762059	P01027W	380022	762235
P00993W	375936	762059	P01028W	380037	762235

SAMPLE SITE	LAT	LONG
PO1029W	380054	762235
PO1030W	380108	762235
PO1031W	375922	762255
PO1032W	375936	762255
PO1033W	375951	762255
PO1034W	380008	762255
PO1035W	380022	762255
PO1036W	380037	762255
PO1037W	380054	762255
PO1038W	380108	762255
PO1039W	375922	762315
PO1040W	375936	762315
PO1041W	375951	762315
PO1042W	380008	762315
PO1043W	380022	762315
PO1044W	380037	762315
PO1045W	380054	762315
PO1046W	380108	762315
PO1047W	380122	762315
PO1048W	375936	762333
PO1049W	375951	762333
PO1050W	380008	762333
PO1051W	380022	762333
PO1052W	380037	762333
PO1053W	380054	762333
PO1054W	380108	762333
PO1055W	380122	762333
PO1056W	380138	762333
PO1057W	375936	762352
PO1058W	375951	762352
PO1059W	380008	762352
PO1060W	380022	762352
PO1061W	380037	762352
PO1062W	380054	762352
PO1063W	380108	762352
PO1064W	380122	762352
PO1065W	380138	762352
PO1066W	380037	762415
PO1067W	380054	762415
PO1068W	380108	762415
PO1069W	380122	762415
PO1070W	380122	762415
PO1071W	380152	762415
PO1072W	380037	762433
PO1073W	380054	762433
PO1074W	380108	762433
PO1075W	380122	762433
PO1076W	380238	762433
PO1077W	380152	762433
PO1078W	380209	762433
PO1079W	380054	762453
PO1080W	380108	762453
PO1081W	380122	762453
PO1082W	380138	762453
PO1083W	380152	762453
PO1084W	380209	762453
PO1085W	380225	762453
PO1086W	380108	762512
PO1087W	380122	762512
PO1088W	380138	762512
PO1089W	380152	762512
PO1090W	380209	762512
PO1091W	380225	762512
PO1092W	380240	762512
PO1093W	380122	762530
PO1094W	380138	762530
PO1095W	380152	762530
PO1096W	380209	762530
PO1097W	380225	762530

SAMPLE SITE	LAT	LONG
PO1098W	380240	762530
PO1099W	380256	762530
PO1100W	380152	762550
PO1101W	380209	762550
PO1102W	380225	762550
PO1103W	380240	762550
PO1104W	380256	762550
PO1105W	380211	762611
PO1106W	380225	762611
PO1107W	380240	762611
PO1108W	380256	762611
PO1109W	380310	762611
PO1110W	380225	762630
PO1111W	380240	762630
PO1112W	380256	762630
PO1113W	380310	762630
PO1114W	380225	762650
PO1115W	380240	762650
PO1116W	380256	762650
PO1117W	380310	762650
PO1118W	380325	762550
PO1119W	380225	762709
PO1120W	380240	762709
PO1121W	380256	762709
PO1122W	380310	762709
PO1123W	380325	762709
PO1124W	380227	762725
PO1125W	380240	762725
PO1126W	380256	762725
PO1127W	380310	762725
PO1128W	380325	762725
PO1129W	380340	762725
PO1130W	380227	762748
PO1131W	380240	762748
PO1132W	380256	762748
PO1133W	380310	762748
PO1134W	380325	762748
PO1135W	380340	762748
PO1136W	380240	762805
PO1137W	380256	762805
PO1138W	380310	762805
PO1139W	380325	762805
PO1140W	380340	762805
PO1141W	380256	762820
PO1142W	380310	762820
PO1143W	380325	762820
PO1144W	380340	762820
PO1145W	380256	762840
PO1146W	380310	762840
PO1147W	380325	762840
PO1148W	380340	762840
PO1149W	380310	762903
PO1150W	380325	762903
PO1151W	380340	762903
PO1152W	380325	762920
PO1153W	380340	762920
PO1154W	380340	762940
PO1155W	380355	762940
PO1156W	380355	763000
PO1157W	380408	763000
PO1158W	380303	763017
PO1159W	380410	763017
PO1160W	380426	763039
PO1161W	380442	763039
PO1162W	380442	763056
PO1163W	380442	763115
PO1164W	380442	763130
PO1165W	380456	763050
PO1166W	380456	763115
PO1167W	380456	763130
PO1168W	380512	763115

SAMPLE SITE	LAT	LONG
PO1169W	380512	763130
PO1170W	380512	763150
PO1171W	380528	763130
PO1172W	380528	763150
PO1173W	380528	763216
PO1174W	380545	763150
PO1175W	380545	763216
PO1176W	380545	763232
PO1177W	380600	763216
PO1178W	380600	763232
PO1179W	380615	763216
PO1180W	380615	763232
PO1181W	380615	763255
PO1182W	380630	763232
PO1183W	380630	763255
PO1184W	380630	763314
PO1185W	380645	763255
PO1186W	380645	763314
PO1187W	380645	763330
PO1188W	380702	763314
PO1189W	380702	763330
PO1190W	380716	763314
PO1191W	380716	763330
PO1192W	380716	763340
PO1193W	380732	763330
PO1194W	380732	763340
PO1195W	380747	763340
PO1196W	380803	763413
PO1197W	380138	762000
PO1198W	380238	762020
PO1199W	380152	762020
PO1200W	380209	762020
PO1201W	380238	762038
PO1202W	380152	762038
PO1203W	380209	762038

SAMPLE SITE	LAT	LONG
PO1204W	380225	762038
PO1205W	380152	762059
PO1206W	380209	762059
PO1207W	380225	762059
PO1208W	380240	762059
PO1209W	380153	762118
PO1210W	380209	762118
PO1211W	380225	762118
PO1212W	380240	762118
PO1213W	380209	762138
PO1214W	380225	762138
PO1215W	380240	762138
PO1216W	380256	762138
PO1217W	380225	762157
PO1218W	380240	762157
PO1219W	380256	762157
PO1220W	380235	762214
PO1221W	380240	762214
PO1222W	380256	762214
PO1223W	380240	762235
PO1224W	380256	762235
PO1225W	380310	762235
PO1226W	380240	762255
PO1227W	380256	762255
PO1228W	380310	762255
PO1229W	380324	762255
PO1230W	380310	762315
PO1231W	380325	762315
PO1232W	380310	762333
PO1233W	380325	762333
PO1234W	380340	762333
PO1235W	380325	762352
PO1236W	380340	762352
PO1237W	380355	762352
PO1238W	380330	762415

SAMPLE SITE	LAT	LONG	SAMPLE SITE	LAT	LONG
PO1239W	380340	762415	PO1274W	380528	762820
PO1240W	380355	762415	PO1275W	380543	762820
PO1241W	380410	762415	PO1276W	380515	762840
PO1242W	380340	762433	PO1277W	380528	762840
PO1243W	380355	762433	PO1278W	380545	762840
PO1244W	380410	762433	PO1279W	380456	762903
PO1245W	380426	762433	PO1280W	380512	762903
PO1246W	380355	762453	PO1281W	380528	762903
PO1247W	380410	762433	PO1282W	380545	762903
PO1248W	380426	762433	PO1283W	380600	762903
PO1249W	380410	762512	PO1284W	380512	762920
PO1250W	380426	762512	PO1285W	380528	762920
PO1251W	380442	762512	PO1286W	380545	762920
PO1252W	380426	762530	PO1287W	380600	762920
PO1253W	380442	762530	PO1288W	380615	762920
PO1254W	380456	762530	PO1289W	380528	762940
PO1255W	380426	762550	PO1290W	380545	762940
PO1256W	380442	762550	PO1291W	380600	762940
PO1257W	380456	762550	PO1292W	380615	762940
PO1258W	380512	762550	PO1293W	380630	762940
PO1259W	380426	762611	PO1294W	380545	763000
PO1260W	380442	762611	PO1295W	380600	763000
PO1261W	380456	762611	PO1296W	380615	763000
PO1262W	380512	762611	PO1297W	380630	763000
PO1263W	380426	762630	PO1298W	380600	763017
PO1264W	380442	762630	PO1299W	380615	763017
PO1265W	380456	762630	PO1300W	380630	763017
PO1266W	380512	762630	PO1301W	380645	763017
PO1267W	380442	762630	PO1302W	380630	763039
PO1268W	380442	762709	PO1303W	380645	763039
PO1269W	380442	762725	PO1304W	380702	763039
PO1270W	380456	762748	PO1305W	380716	763039
PO1271W	380512	762805	PO1306W	380630	763056
PO1272W	380456	762820	PO1307W	380645	763056
PO1273W	380512	762820	PO1308W	380702	763056

SAMPLE SITE	LAT	LONG	SAMPLE SITE	LAT	LONG
PO1309W	380716	763056	PO1344W	381040	763658
PO1310W	380702	763115	PO1345W	381054	763658
PO1311W	380732	763130	PO1346W	381110	763658
PO1312W	380747	763130	PO1347W	381125	763658
PO1313W	380732	763115	PO1348W	381050	763718
PO1314W	380934	763345	PO1349W	381110	763718
PO1315W	380952	763407	PO1350W	381128	763718
PO1316W	381010	763407	PO1351W	381128	763741
PO1317W	380747	763432	PO1352W	381141	763741
PO1318W	381024	763446	PO1353W	381211	764151
PO1319W	381040	763504	PO1354W	381211	764210
PO1320W	381024	763524	PO1355W	382325	770011
PO1321W	381040	763524	PO1356W	382338	770027
PO1322W	381054	763524	PO1357W	382407	770108
PO1323W	380935	763542	PO1358W	382418	770128
PO1324W	381009	763542	PO1359W	382426	770226
PO1325W	381024	763542	PO1360W	382424	770245
PO1326W	381040	763542	PO1361W	382425	770304
PO1327W	381054	763542	PO1362W	382435	770323
PO1328W	380950	763603	PO1363W	382423	770323
PO1329W	381009	763603	PO1364W	382423	770341
PO1330W	381024	763603	PO1365W	382409	770343
PO1331W	381040	763603	PO1366W	382405	770400
PO1332W	381050	763623	PO1367W	382405	770417
PO1333W	381024	763623	PO1368W	382356	770419
PO1334W	381054	763603	PO1369W	382404	770436
PO1335W	381109	763603	PO1370W	382355	770438
PO1336W	381040	763623	PO1371W	382355	770456
PO1337W	381054	763623	PO1372W	382343	770458
PO1338W	381110	763623	PO1373W	382353	770513
PO1339W	381024	763639	PO1374W	382337	770516
PO1340W	381040	763639	PO1375W	382340	770534
PO1341W	381054	763639	PO1376W	382321	770807
PO1342W	381110	763639	PO1377W	382226	770809
PO1343W	381024	763658	PO1378W	382213	770824

SAMPLE SITE	LAT	LONG	SAMPLE SITE	LAT	LONG
PO1379W	382140	771018	PO1386W	382111	771150
PO1380W	382130	771022	PO1387W	382107	771210
PO1381W	382126	771037	PO1388W	382010	771211
PO1382W	382120	771054	PO1389W	382057	771230
PO1383W	382110	771058	PO1390W	382106	771249
PO1384W	382108	771113	PO1391W	382053	771327
PO1385W	382108	771132	PO1392W	382104	771342

POTOMAC RED STRATUM (50' AND OVER)

SAMPLE SITE	LAT	LONG
PO1403R	380054	761923
PO1404R	380104	761923
PO1405R	380054	761942
PO1406R	380108	761942
PO1407R	380054	762000
PO1408R	380108	762000
PO1409R	380120	762020
PO1410R	380108	762020
PO1411R	380054	762020
PO1412R	380042	762020
PO1413R	380054	762038
PO1414R	380108	762038
PO1415R	380123	762038
PO1416R	380108	762059
PO1417R	380122	762059
PO1418R	380056	762118
PO1419R	380108	762118
PO1420R	380122	762118
PO1421R	380108	762138
PO1422R	380122	762138
PO1423R	380138	762138
PO1424R	380122	762157
PO1425R	380138	762157
PO1426R	380152	762157
PO1427R	380138	762214
PO1428R	380152	762214
PO1429R	380207	762214
PO1430R	380138	762235
PO1431R	380152	762235
PO1432R	380209	762235
PO1433R	380143	762255
PO1434R	380152	762255
PO1435R	380209	762255
PO1436R	380223	762255
PO1437R	380152	762315

POTOMAC RED STRATUM (50' AND OVER)

SAMPLE SITE	LAT	LONG
PO1438R	380209	762315
PO1439R	380225	762315
PO1440R	380209	762333
PO1441R	380225	762333
PO1442R	380240	762333
PO1443R	380225	762352
PO1444R	380240	762352
PO1445R	380256	762352
PO1446R	380226	762415
PO1447R	380240	762415
PO1448R	380256	762415
PO1449R	380310	762415
PO1450R	380240	762433
PO1451R	380256	762433
PO1452R	380310	762433
PO1453R	380256	762453
PO1454R	380310	762453
PO1455R	380325	762453
PO1456R	380310	762512
PO1457R	380325	762512
PO1458R	380340	762512
PO1459R	380325	762530
PO1460R	380340	762530
PO1461R	380355	762530
PO1462R	380325	762550
PO1463R	380340	762550
PO1464R	380355	762550
PO1465R	380327	762011
PO1466R	380340	762011
PO1467R	380355	762011
PO1468R	380410	762011
PO1469R	380340	762629
PO1470R	380355	762629

SAMPLE SITE	LAT	LONG
PO1471R	380410	762629
PO1472R	380344	762659
PO1473R	380355	762659
PO1474R	380410	762659
PO1475R	380355	762713
PO1476R	380410	762713
PO1477R	380355	762725
PO1478R	380410	762725
PO1479R	380426	762725
PO1480R	380410	762748
PO1481R	380426	762748
PO1482R	380441	762748
PO1483R	380410	762805
PO1484R	380426	762805
PO1485R	380442	762805
PO1486R	380410	762820
PO1487R	380426	762820
PO1488R	380440	762820
PO1489R	380410	762840
PO1490R	380426	762840
PO1491R	380442	762840
PO1492R	380410	762903
PO1493R	380426	762903
PO1494R	380442	762903
PO1495R	380410	762920
PO1496R	380426	762920
PO1497R	380442	762920
PO1498R	380456	762920
PO1499R	380416	762920
PO1500R	380426	762940
PO1501R	380442	762940
PO1502R	380456	762940
PO1503R	380510	762940
PO1504R	380426	763000
PO1505R	380442	763000

SAMPLE SITE	LAT	LONG
PO1506R	380456	763000
PO1507R	380512	763000
PO1508R	380442	763017
PO1509R	380456	763017
PO1510R	380412	763017
PO1511R	380528	763017
PO1512R	380500	763039
PO1513R	380512	763039
PO1514R	380528	763039
PO1515R	380545	763039
PO1516R	380514	763056
PO1517R	380528	763056
PO1518R	380545	763056
PO1519R	380600	763056
PO1520R	380612	763056
PO1521R	380528	763115
PO1522R	380545	763115
PO1523R	380600	763115
PO1524R	380615	763115
PO1525R	380600	763130
PO1526R	380615	763130
PO1527R	380630	763130
PO1528R	380645	763130
PO1529R	380702	763130
PO1530R	380615	763150
PO1531R	380630	763150
PO1532R	380645	763150
PO1533R	380702	763150
PO1534R	380716	763150
PO1535R	380732	763150
PO1536R	380645	763216
PO1537R	380700	763214
PO1538R	380717	763214
PO1539R	380732	763214
PO1540R	380746	763214

SAMPLE SITE	LAT	LONG
PO1541R	380700	763230
PO1542R	380717	763230
PO1543R	380732	763230
PO1544R	380746	763230
PO1545R	380800	763230
PO1546R	380717	763249
PO1547R	380732	763249
PO1548R	380746	763249
PO1549R	380803	763249
PO1550R	380817	763249
PO1551R	380732	763308
PO1552R	380746	763310
PO1553R	380803	763310
PO1554R	380816	763310
PO1555R	380803	763330
PO1556R	380816	763330
PO1557R	380834	763330
PO1558R	380850	763330
PO1559R	380816	763346
PO1560R	380834	763346
PO1561R	380850	763346
PO1562R	380906	763346
PO1563R	380803	763345
PO1564R	380820	763402
PO1565R	380834	763406
PO1566R	380850	763406
PO1567R	380906	763406
PO1568R	380921	763406

SAMPLE SITE	LAT	LONG
PO1569R	380934	763407
PO1570R	380850	763427
PO1571R	380906	763427
PO1572R	380921	763427
PO1573R	380934	763427
PO1574R	380951	763428
PO1575R	380906	763446
PO1576R	380921	763446
PO1577R	380934	763446
PO1578R	380951	763446
PO1579R	380921	763502
PO1580R	380934	763502
PO1581R	380951	763502
PO1582R	381007	763502
PO1583R	380934	763524
PO1584R	380951	763524
PO1585R	381007	763521
PO1586R	382343	765945
PO1587R	382342	770010
PO1588R	382354	770027
PO1589R	382403	770032
PO1590R	382408	770046
PO1591R	382417	770109
PO1592R	382436	770130
PO1593R	382540	770143
PO1594R	382442	770206
PO1595R	382439	770226
PO1596R	382437	770243