FINAL REPORT

Hawaii Longline Seabird

Mortality Mitigation Project

Appendices A-I

September 1999

GARCIA AND ASSOCIATES

NATURAL & CULTURAL RESOURCES CONSULTANTS

GANDA

APPENDIX A: SEABIRD BYCATCH CONTACT LIST

APPENDIX A

Contacts for Hawaii Longline Pelagic Seabird Mortality Mitigation Project

Name	Title	Agency/Organization	Location
Dr. David Anderson	Professor	Department of Biology, Wake Forest University	Winston-Salem, North Carolina
Mr. Stuart Arceneaux	Biological Technician, Fisheries	National Marine Fisheries Service (NMFS), Hawaii Pelagic Longline Observer Program	Honolulu, Hawaii
Mr. James Cook	Owner	Pacific Ocean Producers	Honolulu, Hawaii
Ms. Kathy Cousins	Seabird Coordinator	NMFS, Pacific Islands Area Office	Honolulu, Hawaii
Mr. Joseph Dane	Computer Specialist	NMFS	Honolulu Laboratory
Mr. Minh Dang	Owner, Fishing Vessel	Pacific Fishing Supply	Honolulu, Hawaii
Mr. James Day	Enforcement Officer	NMFS, Enforcement Division	Honolulu, Hawaii
Dr. Brian Fadely	Resource Management Specialist	NMFS, Protected Resource Division	Juneau, Alaska
Mr. Shannon Fitzgerald	Director of Observers	NMFS, North Pacific Observer Program	Anchorage, Alaska
Dr. Elizabeth Flint	Wildlife Biologist	U.S. Fish and Wildlife Service (USFWS)	Hawaiian and Pacific Wildlife Refuge Complex
Mr. Eric Forney	Biological Technician, Fisheries	NMFS, Hawaii Pelagic Longline Observer Program	Honolulu, Hawaii
Capt. Mike Foy	Commercial Fisherman	Finest Kind Marine, Inc.	Honolulu, Hawaii
Dr. Rosemary Gales	Biologist	Tasmania Parks and Wildlife Service	Hobart, Tasmania
Mr. Skip Gallimore	Owner, Fishing Vessels	Finest Kind Marine, Inc.	Honolulu, Hawaii Barnagaut Light, NJ
Capt. Steven Gates	Commercial Fisherman	Hawaii Pelagic Longline Fishery	Honolulu, Hawaii
Mr. Russell Haner	Fisheries Biologist	National Oceanic and Atmospheric Administration (NOAA)	R/V Townsend Cromwell
Mr. Robert Harman	Manager, SW Region Vessel Monitoring System	NMFS, Office of Law Enforcement	Honolulu, Hawaii

Name	Title	Agency/Organization	Location
Mr. Calvin Ko Huynh	Owner, Fishing Vessel	Hawaii Pelagic Longline Fishery	Honolulu, Hawaii
Mr. Hans Jusseit	Executive Director	Eastern Australian Tuna Boat Owners Association	Moloolaba, Australia
Mrs. Stephanie Kalish	Logbook Officer	Australian Fisheries Management Association	Canberra, Australia
Dr. Charles Karnella	Administrator	NMFS, Pacific Island Area Office	Honolulu, Hawaii
Dr. Pierre Kleiber	Fisheries Biologist	NMFS, Honolulu Laboratory	Honolulu, Hawaii
Capt. Trong Le	Commercial Fisherman	Hawaii Pelagic Longline Fishery	Honolulu, Hawaii
Mr. Ed Melvin	Marine Fisheries Specialist	University of Washington, Sea Grant	Seattle, Washington
Dr. Vivian Mendenhall	Seabird Specialist	USFWS (retired)	Anchorage, Alaska
Ms. Elizabeth Mitchell	Fisheries Observer (former)	NMFS	Eugene, Oregon
Ms. Janice Molloy	Species Protection Officer	New Zealand Department of Conservation	Wellington, New Zealand
Dr. Michael Musyl	Fisheries Oceanographer	University of Hawaii at Manoa	Honolulu, Hawaii
Mr. Xuan Nguyen	Commercial Fisherman	Hawaii Pelagic Longline Fishery	Honolulu, Hawaii
Mr. Declan O'Toole	Fisheries Researcher	Emerald/Fisheries Science	Christchurch, New Zealand
Ms. Kim Rivera	Wildlife Biologist	NMFS, Protected Resources Division	Juneau, Alaska
Mr. Martin Scott	Senior Observer	Australian Fisheries Management Authority	Canberra, Australia
Dr. Robert Skillman	Fisheries Biologist	NMFS, Honolulu Laboratory	Honolulu, Hawaii
Mr. Khan Truong	Owner, Fishing Vessel	Hawaii Pelagic Longline Fishery	Honolulu, Hawaii
Mr. Elvis Van	Owner, Fishing Vessel	Hawaii Pelagic Longline Fishery	Honolulu, Hawaii
Mr. Kevin Van	Owner, Fishing Vessel	Hi Seas Hawaii Fishing Supply	Honolulu, Hawaii
Mr. Louis Van Fossen	Assistant Port Coordinator	NMFS, Hawaii Pelagic Longline Observer Program	Honolulu, Hawaii
Capt. Joseph Weeks	Commercial Fisherman	Finest Kind Marine, Inc.	Honolulu, Hawaii

APPENDIX B: DATA COLLECTION FORMS AND PROTOCOL DESCRIPTIONS

PROTOCOL FOR SEABIRD/PELAGIC LONGLINE INTERACTION RECORD

1) PERMIT# = The vessel's six digit fishing permit number.

2) TRIP# = Consecutive longline fishing trip number.

3) REC. FROM = Time observation of gear set or haul begins. Observations are ended every 30 minutes.

4) REC. TO = Time 30 minute observation period ends.

5) DETERRENT = Type of deterrent being tested. If none, it will be a control period.

6) SET NO. = Consecutively sequenced set number for that trip. Haul number refers to the set.

7) DATE = Date at the start of the observation period being recorded.

8) SET/HAUL = Circle one to specify if current observation period occurs during set or haul.

9) WIND SPEED = The wind speed in knots at the time observation period begins.

10) SEA HEIGHT = Wave height in feet at time observation period begins.

11) SWELL HEIGHT = Swell height in feet at time observation period begins.

12) VESSEL SPEED = Speed of vessel in knots when observation period begins.

13) BAIT COND. = Bait condition during set at time of BEGIN OBS. Example: 1 = Good; completely thawed, 2 = Fair; partially thawed, some ice crystals, bait somewhat rigid, 3 = Poor: frozen, ice crystals present, bait rigid.

14) LOG PAGE # = Record page number from the N.M.F.S. Western Pacific Longline Fishing Log for the set/haul being observed.

15) TARGET SPECIES = Target species of the set as reported by the captain.

16) MOON = Apparent moon size. If moon is completely obscured by clouds or below horizon it will be listed as " ". Example: , <1/2, 1/2, <1/2, full.

17) CLOUD COVER = Cloud cover at time observation period begins. Example; clear, partly cloudy, cloudy, fog/haze, rain.

18) BEAUFORT SCALE = Sea state in Beaufort scale.

19) BFA, LA, and ST/O = Estimated number of seabirds (BFA = Black Footed albatross, LA = Laysan albatross, ST/O = Short Tailed albatross or Other seabird, specify) present in the "Zone of Convergence". The zone of convergence is the area 300 meters to port and 300 meters to starboard by 300 meters astern. This area will be considered the flight area that birds actively following the vessel will use in order to converge on the baited hooks, bait discards, and offal discards. Record at beginning and end of observation period.
Example: 0, 1–5, 5–10, 10–15, 15–20, 20–30, 30–50, 50–100, over 100.

20) SPECIES = BFA, Black Footed albatross. LA, Laysan albatross. STA/O, Short-tailed albatross or Other Seabird (Circle proper hyphenation). NOTE: Behaviors are to be tallied in the blocks corresponding to whether they occur within the zone effectively covered by the deterrent (IN BDZ), or beyond the zone covered by the deterrent (OUT BDZ). NOTE: BDZ = Bird Deterrent Zone.

21) ATTEMPTS = The number of seabird attempts to pick up baited hooks. Each attempt will be recorded by making tic marks in the boxes provided. Attempts will be recorded as one of three behaviors whenever possible; Chases, Landings, and Dives. Attempts will be counted only for pursuits of baited hooks or lightsticks attached to droppers/snoods when they occur in the "Zone of Opportunity". The zone of opportunity is the area where the baited hook may be brought to the surface by the turbulence of the wake, tension on the gear created by motion of the vessel, or retrieval by the crew. Birds may have an opportunity to strike the bait either by diving underwater or by directly picking bait from sea surface. Example: During line setting, the maximum zone width would be the length of the dropper/snood laterally to either side of the mainline, and astern to the point where the baits are too deep to be retrieved by diving birds. This distance will be determined by noting the farthest distance behind the vessel that a bird is observed diving for a bait as determined by calibrated binoculars or trailing a buoy on a calibrated line to that point. During gear haul, the zone will include the area abeam where a baited hook may appear at the surface or below but within diving range of a bird and to the point astern where a bait trails at the full extent of the dropper/snood. A single bird may exhibit more than one "attempt" behavior or the same behavior multiple times. If the number of attempts become too great to subdivide, all chases, landings, and dives will be recorded under total attempts for that observation period. Collecting bird data will take precedence over collection of other data elements.

21a) CHASE = Stalling or hovering in the air within 1 meter of the visible baited hook or lightstick. Paddling/running on surface in pursuit of baited hooks.

21b) LANDING = Landing on the water within 2 meters of a visible or submerged baited hook.

21c) DIVE = A bird that submerges its head or body in an attempt to retrieve a submerged baited hook whether successful or not. Dives for discarded baits/offal will not be counted, even if they occur in the zone of opportunity.

22) INTERACTIONS = Observed contact by individual seabirds with the gear or baited hooks. Bait on the hook is considered part of the gear. Interactions will be subdivided whenever possible into three categories: Contacts, Hookings, and Entanglements. If the number of interactions become too great to subdivide, all contacts, hookings, and entanglements will be counted as interactions for that observation period. Interactions that become mortalities will also be counted in the mortality column.

22a) CONTACT = Contact consists of any contact with any portion of the gear within the zone of opportunity. A single bird may contact the gear multiple times with each being recorded. Example: Picking up baited hook, pecking baited hook or lightstick, flying into mainline or dropper/snood, pecking floats, etc.

22b) HOOKINGS = Any time a bird is hooked on any part of its body for any duration. If the bird then becomes entangled only the hooking will be counted.

22c) ENTANGLEMENTS = Any bird that is entangled on any part of its body for any duration. An entanglement that results in a hooking will be counted as entangled and hooked.

23) MORTALITY = Mortalities will be recorded during the period of observation in which they occurred. A bird seen to interact on the set such that it becomes hooked or entangled and drawn under the water will be assumed killed and be counted at that time. A flagged clip will be attached to the mainline so that a bird is not added to any mortalities occurring during haul. Mortalities will also include birds brought up dead during the haul, killed during the haul, or mortally wounded but returned to the water (i.e., unresponsive, unable to fly, flopping on the water, broken wing, or bleeding profusely). Describe condition in "comments" section.

24) COMMENTS = Area for recording information from that 30-minute observation period pertaining to offal discards, bird reactions, problems with, or changes to deterrents. Also, information on incidentally caught birds disposition, injuries, tags, etc. Diagram of wind direction versus vessel direction should be drawn for each observation period.

PROTOCOL FOR VESSEL SPECIFICATIONS FORM

1) TRIP #:= The sequential number assigned to this trip.

2) VESSEL NAME: = Record the name of the vessel.

3) PERMIT #: = Record the vessel's fishing permit number.

4) CALL SIGN: = Record the vessel's designated single sideband radio call sign.

5) VESSEL OWNER/REPRESENTATIVE NAME: = Record the name of the vessel owner or vessel representative, including middle initial.

6) VESSEL OWNER/REPRESENTATIVE ADDRESS: = Record the address of the vessel owner or vessel representative.

7) VESSEL LOA: = Record the vessel's length over all (LOA) in feet as written in vessel documentation.

8) VESSEL WIDTH: = Record the width of vessel in feet.

9) CAPTAIN: = Record the captain's name, including middle initial.

10) DATE OF DEPARTURE: = Record the date the vessel leaves port for fishing grounds.

11) ARRIVAL: = Record the date the vessel returns to port.

12) TIME OF DEPARTURE: = Record the time the vessel leaves port for fishing grounds.

13) ARRIVAL: = Record the time the vessel arrives in port at the end of the trip.

14) TOTAL DAYS AT SEA: = Record the total days at sea including arrival and departure days.

15) TOTAL SETS: = Record the number of sets completed during the trip.

SAFETY EQUIPMENT CHECK LIST:

This checklist will be completed prior to departure to assure that U.S. Coast Guard minimum safety equipment is aboard and up to date.

VESSEL SPECIFICATIONS

TRIP #:_____

VESSEL NAME:_____, PERMIT #:_____, CALL SIGN:_____

VESSEL OWNER/REPRESENTATIVE NAME:_____

VESSEL OWNER/REPRESENTATIVE ADDRESS:_____

_____

VESSEL LOA:___FEET, VESSEL WIDTH:___FEET, CAPTAIN:_____

DATE OF DEPARTURE:_____, ARRIVAL:_____,

PORT OF DEPARTURE:_____, ARRIVAL:_____,

TIME OF DEPARTURE:_____, ARRIVAL:_____,

TOTAL DAYS AT SEA:_____, TOTAL SETS:_____,

SAFETY EQUIPMENT CHECK LIST:

1) EPIRB:____

BATTERY EXP. DATE:____

HYDRO-RELEASE EXP. DATE:____

2) LIFE RAFT:____

CAPACITY:____

EXP. DATE:____

HYDRO-RELEASE EXP. DATE:____

3) RADAR:____

4) RADIOS:

S.S.B.:____

V.H.S.:____

5) FIRE EXTINGUISHERS:____

EXP. DATES:____

6) P.F.D.'s:____

PROTOCOL FOR DAILY OPERATIONAL RECORD

SET AND HAUL DATA:

1) TRIP #: = Record the sequential trip number assigned to the current trip.

2) SET #: = Record the sequential number corresponding to the current set.

3) PERMIT #: = Record the vessel's fishing permit number.

4) TARGET SPECIES: = Record the target species for the current set as reported by the vessel captain.

SET:

1) DATE: = Record the date the current set begins.

2) TIME BEGIN: = Record the time (in military time) the gear enters the water to begin fishing.

3) TIME END: = Record the time the vessel separates from the mainline after the gear is deployed.

4) LAT: = Record the latitude in degrees and minutes at the beginning and end of the current set.

5) LONG: = Record the longitude in degrees and minutes at the beginning and end of the current set.

HAUL:

1) DATE: = Record the date the current set is hauled.

2) TIME BEGIN: = Record the time the gear is brought onboard during retrieval.

3) TIME END: = Record the time the gear has been completely retrieved.

4) LAT: = Record the latitude in degrees and longitude in degrees and minutes at the beginning and end of the current gear retrieval.

GEAR DATA:

1) MAINLINE LENGTH: = Record the length of mainline in miles that was deployed during that set as reported by the captain.

2) SET DISTANCE: = Record the distance in miles the vessel traveled during the set as recorded on the G.P.S. plotter.

3) MAINLINE MATERIAL: = Record the mainline material as: MONOFILAMENT, MULTIFILAMENT, or OTHER.

4) MAINLINE DIAMETER: = Record the diameter of the mainline in millimeters.

5) FLOAT LINE LENGTH: = record the length of the float line in meters.

6) # FLOATS SET: = Record the number of floats that were set with the gear including radio buoys.

7) DROPPER MATERIAL: = Record the dropper/branch line material that is attached to the hook as: MONOFILAMENT, MULTIFILAMENT, WIRE, or MIXED. Record it as MIXED if the dropper is constructed of different types of materials (i.e., monofilament and wire) and describe it on the back of the form.

8) DROPPER DIAMETER: = Record the diameter of the dropper/branch line in millimeters.

9) DROPPER LENGTH: = Record the dropper/branch line length in meters.

10) SHOOTER: = Record whether a mainline shooter was used during the set. Circle YES or NO.

11) SHOOTER SPEED: = Record the speed of line shooter in knots.

12) TIMER SETTING: = Record the seconds between tones if an electric timer is used to space droppers/branch lines.

13) VESSEL SPEED: = Record the vessel speed in knots during set.

14) WEIGHT SIZE: = Record the weight of sinkers on droppers/branch lines in grams.

15) DISTANCE FROM HOOK: = Record the distance between the weight and the hook on the dropper/branch line.

16) HOOK TYPE: = Record whether the hook is a MUSTAD, TUNA, or OTHER. Describe OTHER hook type on back of the form.

17) HOOK SIZE: = Record the hook size.

18) # HOOKS SET: = Record the total number of hooks deployed in the set. Preferably, this number should be gathered by actual counting before and after gear is set. The number can also be derived by multiplying the number of hooks set between floats with the number of floats that have hooks set between them.

19) # LIGHT STICKS: = Record the number of light sticks used during the current set. Describe the light stick placement on the back of the form (for example, "on every other dropper/branch line and attached about 2 meters from the hook").

20) COLOR: = Record the color of the light sticks deployed. If multiple colors are used, record the information on the back of the form.

21) BAIT TYPE: = Record the type of bait used such as LARGE SQUID, SMALL SQUID, SANMA, or OTHER (describe on the back of the form).

22) DATA COLLECTOR: = Record the name of the person collecting the data.

23) INTERACTIONS: SET = Were there seabird interactions during the set? Y or N

24) INTERACTIONS: HAUL = Were there seabird interactions during the haul? Y or N

25) MORTALITIES: SET = Were there mortalities during the set? Y or N

26) MORTALITIES: HAUL = Were there mortalities during the haul? Y or N

MITIGATION TECHNIQUE DETAILS:

1) DETERRENT TYPE: = Record the details of the bycatch reduction technique being tested during the current set. For example, the height of the Tori pole being used, the length of the Tori line, the distance the streamers are separated, etc. NOTE: Detailed notes on the effectiveness, construction, configuration, seabird behavior, and difficulties associated with each deterrent should be entered in the Daily Seabird Deterrent Narrative Log.

DAILY OPERATIONAL RECORD

SET & HAUL DATA:

TRIP #: _____ PERMIT #: _____

SET #: _____ TARGET SPECIES: _____

SET

DATE: _____ LAT: DEG: _____ MIN: _____ N/S

TIME BEGIN: _____ LONG: DEG: _____ MIN: _____ E/W

TIME END: _____ LAT: DEG: _____ MIN: _____ N/S

LONG: DEG: _____ MIN: _____ E/W

HAUL

DATE: _____ LAT: DEG: _____ MIN: _____ N/S

TIME BEGIN: _____ LONG: DEG: _____ MIN: _____ E/W

TIME END: _____ LAT: DEG: _____ MIN: _____ N/S

LONG: DEG: _____ MIN: _____ E/W

GEAR DATA:

MAINLINE LENGTH:	miles	WEIGHT SIZE	g
SET DISTANCE:	miles	DISTANCE FROM HOOK:	m
MAINLINE MATERIAL:		HOOK TYPE:	
MAINLINE DIAMETER:	mm	HOOK SIZE:	
FLOAT LINE LENGTH:	m	# HOOKS SET:	
# FLOATS SET:		# HOOKS PER FLOAT:	
DROPPER MATERIAL:		# LIGHT STICKS:	
DROPPER DIAMETER:	mm	COLOR:	
DROPPER LENGTH:	m	BAIT TYPE:	
SHOOTER:	YES NO	DATA COLLECTOR:	
SHOOTER SPEED:	kts	NMFS LOG PAGE #:	
TIMER SETTING:	s	INTERACTIONS: SET	
VESSEL SPEED:	kts	INTERACTIONS: HAUL	
		MORTLITIES: SET	
		MORTALITIES: HAUL	

MITIGATION TECHNIQUE DETAILS:

DETERRENT TYPE: _____

PROTOCOL FOR CATCH TALLY SHEET

1) TRIP #: = Record the sequential trip number assigned to the current trip.

2) DATE: = Record the date the gear retrieval begins.

3) SET #: = Record the sequential number corresponding to the current set.

4) # HOOKS SET: = Record the total number of hooks in the current set.

5) TARGET SPECIES: = Record the target species for the current set as reported by the captain.

6) DETERRENT: = Record the type of seabird deterrent being tested during the current set.

7) DETERRENT: = Record the type of seabird deterrent being tested during the current haul.

8) CATCH SPECIES: = Record the common name for all species caught during the current haul.

9) NUMBER CAUGHT: = Record the individual animals of each species with tic marks. Enter marks in box corresponding to whether animal was caught during a deterrent test or control period on the set.

10) TOTAL: = Record the total number of each species caught for the current set.

CATCH TALLY SHEET NMFS LOG PAGE:_____

TRIP#: _____ SET DATE: _____ HAUL DATE:_____

SET #:_____ # HOOKS SET:_____

TARGET SPECIES: _____

DETERRENT: SET_____ HAUL_____

CATCH SPECIES	C # CAUGHT	D # CAUGHT	C TOTAL	D TOTAL	TOT

APPENDIX C: TORI LINE CONSTRUCTION PROTOCOLS

SC-CAMLR-XII/BG/13
12 October 1993
Original: English
Agenda Item No: 10

OBSERVATIONS ON CCAMLR SPECIFICATIONS FOR STREAMER LINES TO REDUCE LONGLINE BY-CATCH OF SEABIRDS

Delegation of New Zealand

in New Zealand waters and the relative effectiveness of the different designs is unknown. In 1993 a MAF Fisheries scientific observer and Japanese fishers constructed a CCAMLR design streamer line and observed its effectiveness in different weather conditions. The CCAMLR design was also modified for windy conditions, when it appears to be less effective.

This report discusses the CCAMLR streamer line and describes the modified design and its use.

The CCAMLR streamer line design

The standard CCAMLR streamer line design is presented in Figure 1.

1. The streamer line is suspended at the stern from a point about 4.5 m above the water so that the line is directly above the point where the baits hit the water.
2. The streamer line is about 3 mm diameter, have a minimum length of 150 m, and be weighted at the end so that it streams directly behind the ship even in cross winds.
3. At 5 m intervals beginning from the point of attachment to the ship, 5 branch streamers each comprising 2 strands of 3 mm diameter cord should be attached. The length of the branch streamers should range between about 3.5 m nearest the ship to about 1.25 m for the fifth streamer. When the streamer line is deployed, the branch streamers should reach the sea surface and periodically dip into it as the ship heaves. Swivels should be placed in the streamer line at the towing point, before and after the point of attachment of each branch streamer, and immediately before any weight placed on the end of the streamer line. Each branch streamer should have a swivel at its attachment to the streamer line.

(Anon 1990)

After trials with the CCAMLR design, some modifications were made:

1. The weight at the end strains the streamer mainline, especially at the swivel points, and can break after tangling with the longline buoys and snood lines. The streamer line can cross the longline and tangle with the gear during setting. Replacing the weight with a 15 m section of 12 mm rope lowered the strain on the streamer line and reduced tangles.

2. The streamer line often broke on tangling with the longline or snood lines during setting. In the modified design, branch streamers are attached to 12 mm rope instead of 3 mm rope to reduce breakages. A section of 6 mm rope between the streamer line and the trailing section of 12 mm rope acts as a "break-away" should the streamer line become tangled with the longline during setting. This leaves the initial section of the streamer line intact so reducing costs and facilitating replacement of the streamer line.

3. Branch streamers in the CCAMLR design are attached to a short section of the streamer line between two swivels. As this section rotates, branch streamers can wind around the streamer line. The swivel in the branch streamer prevents twisting only of the branch streamer. Attaching the branch streamer to the part of the streamer line swivel that doesn't rotate solves this problem.

4. Five branch streamers do not cover the entire length of streamer line above the water, but the seven in the modified design do.

5. The first branch streamer frequently tangled with the bait during setting and was lost. In the modified design, the first branch streamer is attached 10 m from the stern, and the remaining 6 branch streamers are set at 5 m intervals.

6. The two strands of 3 mm diameter cord of the branch streamers often wrapped around the streamer line in windy conditions. To eliminate this problem the two strands are replaced with a section of 4 mm braided cord attached to the stationary weighted centre of the streamer line swivel, weighted with small weights crimped on at specific points, a section of plastic tubing threaded over the first section of the branch streamer, and then a small swivel with two strands of plastic strapping crimped to one end.

7. The section of streamer line trailing in the water does not protect sinking baits near the surface, especially if the baits are frozen. In the new design eight small streamers are woven into this section of streamer line.

Design and construction of the modified streamer line

Placement and design are important in constructing an effective streamer line. The streamer line has two major components, the streamer line and the pole for deploying it (Figure 2). This streamer line can be easily built from materials readily available to longline vessels.

Pole (Figure 3a, 3b)

1. Sturdy pole with a facility for attaching the streamer line.

2. The pole must extend out from the vessel so that the "towing point" and the trailing streamer line are above the point where the baited hook enters the water, usually 3 to 5 m (Figure 3a).

3. The towing point must be between 5-6 m above the water and about 2-6 m forward of the stern line (Figure 3b).

Streamer Line (Figure 4)

The streamer line has two sections, A and B, and totals 140 m plus the attachment section (from the towing point on the pole to the first heavy duty weighted swivel positioned in-line with the stern). The attachment section can be made of 12 mm rope, attached to the towing point with a shackle or tied securely.

Section A (Figure 5)

1. Forty metres of 12 mm rope with eight heavy duty weighted swivels at 5 m intervals.

2. Seven branch streamers (A1 to A7 in Figure 5) are suspended from the swivels. The first swivel connects the streamer line to the attachment section in-line with the stern.

3. Branch streamers can be permanently attached to the streamer line by crimping them to the swivel (Figure 6) or made removable by crimp fitting them to a shark clip (Figure 7) which can be detached on retrieval and reattached at deployment. The swivels must be grooved in the weighted centre to ensure the branch streamers remain fastened on.

Branch Streamers (Figure 8 and Table 1)

1. The seven branch streamers are of similar configuration but different dimensions.

2. Each branch streamer consists of a single length of white or yellow (for night visibility) 4 mm braided cord with a section of plastic tubing, one or two small lead weights (e.g., the conical weights used with lures), and two lengths of plastic strapping suspended from an ordinary swivel at the end. The dimensions for each streamer are given in Table 1.

3. The plastic tubing is held in place by the lead weight crimped to the braided cord. The lengths for each streamer are specified in table 1. The shorter streamers A5 and A6 have tubing over their entire length: the last streamer requires no plastic tubing.

4. The number and positioning of the weights for each streamer are given in Figure 8. The weights are threaded over the braided cord and crimped into position. The longer streamers, A1 to A4, have two lead weights and the shorter streamers, A5 to A7, one. The lead weight above the swivel is secured over the crimp to reduce snagging with the baited hooks.

5. Two 0.5 m lengths of plastic strapping (as used in packing bait cartons), one white or yellow (night visibility) and the other blue (day visibility), are threaded through a loop of braided cord that is crimped to the small swivel at the end of the streamer (Figure 9).

Section B (Figure 10)

1. This section consists of two pieces of rope of different thicknesses and lengths spliced to the last weighted swivel of section A (Figure 10).

2. The first piece is comprised of 85 m of 6 mm rope with eight white or yellow plastic (strapping) streamers, each 15 cm in length, woven into the rope at 5 m intervals along the first 40 meters. These streamers trail through the water above the sinking baits, and can pass through a pulley on the pole if that system of deployment is used. They should also minimise snagging any snood lines that may be on the surface.

3. The second piece of Section B is 15 m of 12 mm rope to stabilise the streamer line.

The materials used to construct the modified streamer line are listed in Appendix 1.

Summary

Use of the modified CCAMLR streamer line described here should result in more consistent use of streamer lines, reductions in seabird by-catch, reductions in bait loss to seabirds, and less breakage and tangling with itself and the longline.

For the streamer line to be fully effective in discouraging seabirds from seizing baited hooks, it should be directly above the point where the bait enters the water. The minimum total length of the streamer line (sections A and B) is 140 m.

This streamer line has been designed for easy construction from readily available materials on longline vessels. As with all fishing gear, the streamer line and configuration must be regularly maintained and checked for wear.

References

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List of figures

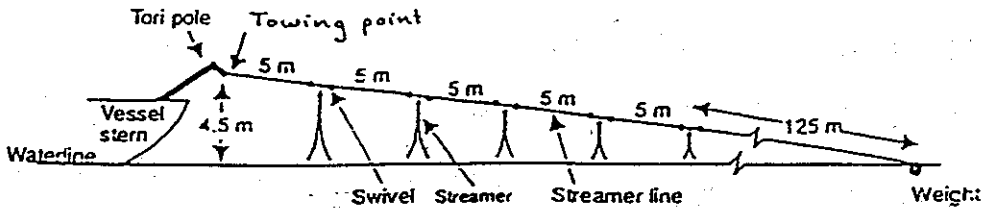


Figure 1. CCAMLR streamer line.

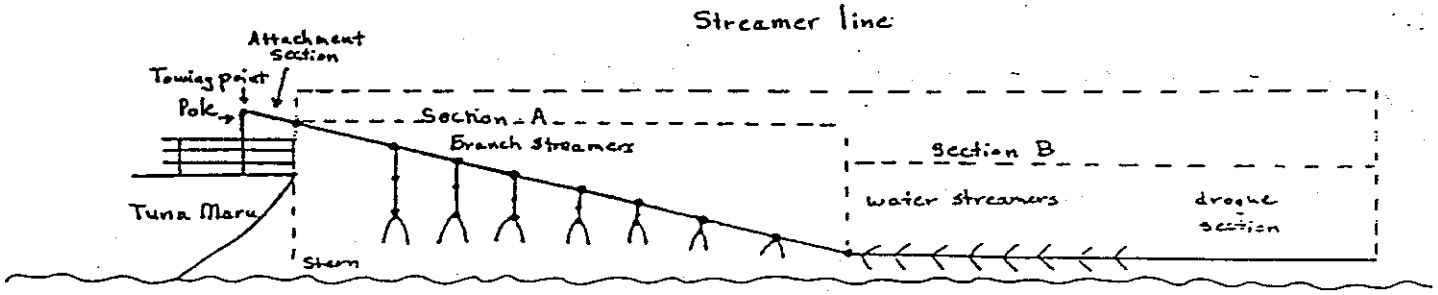
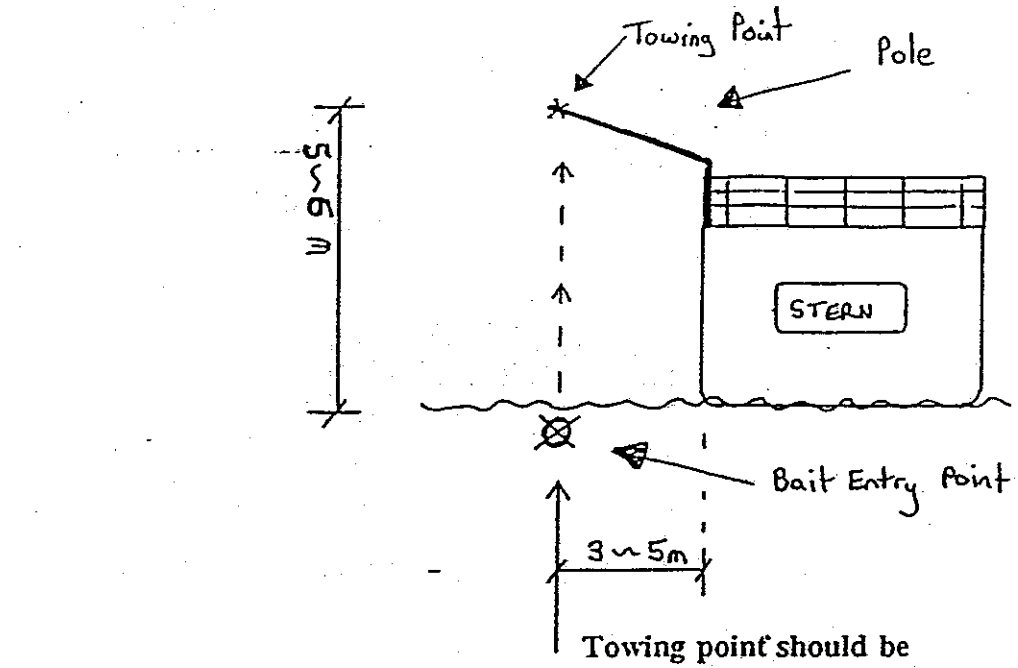


Figure 2. Modified streamer line.



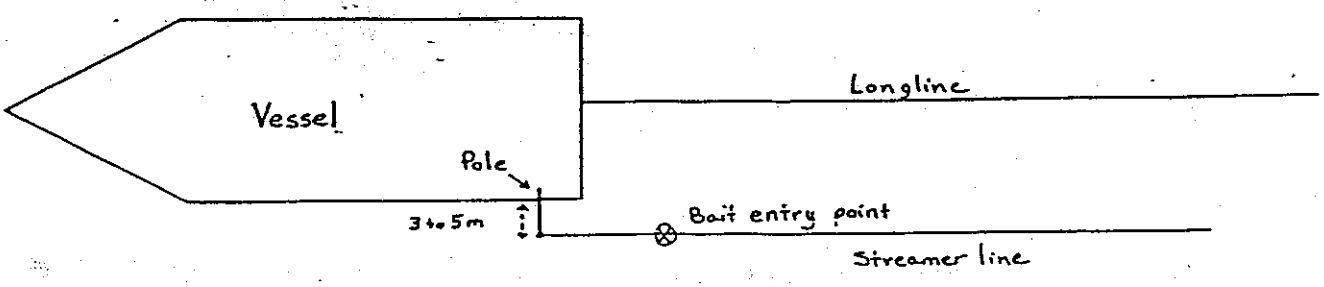
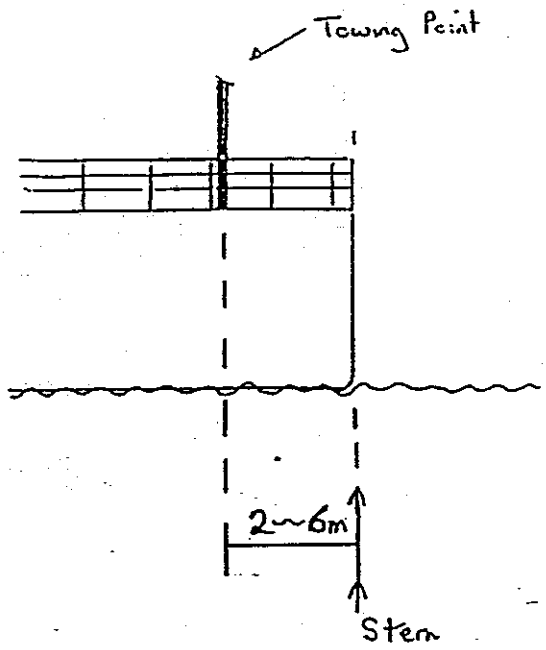


Figure 3a. Placement of pole and towing point in relation to vessel side.



Distance from towing point and stern is dependant on lay-out of upper deck whereby position of pole will vary from vessel to vessel

Figure 3b. Placement of pole and towing point relative to vessel stern.

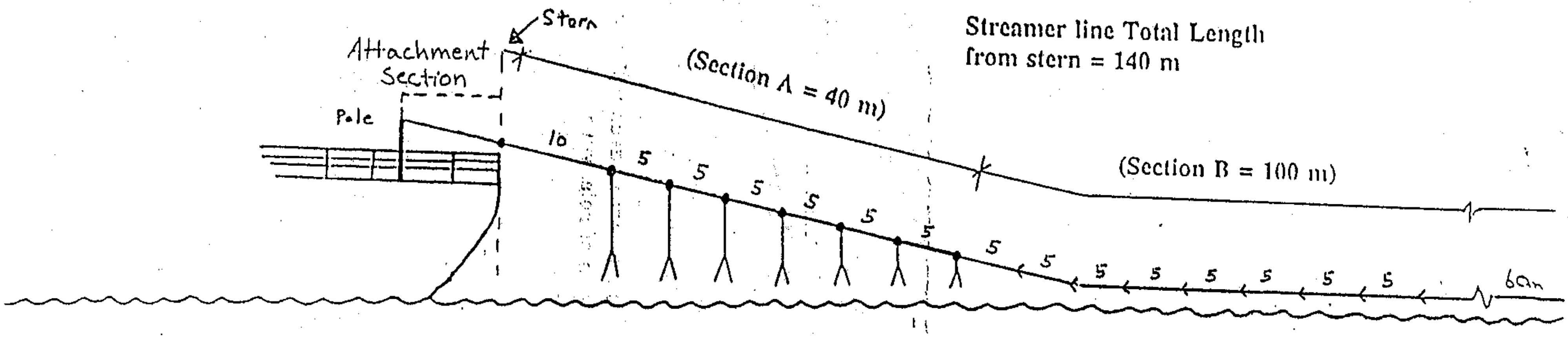


Figure 4. Modified streamer line and attachment section.

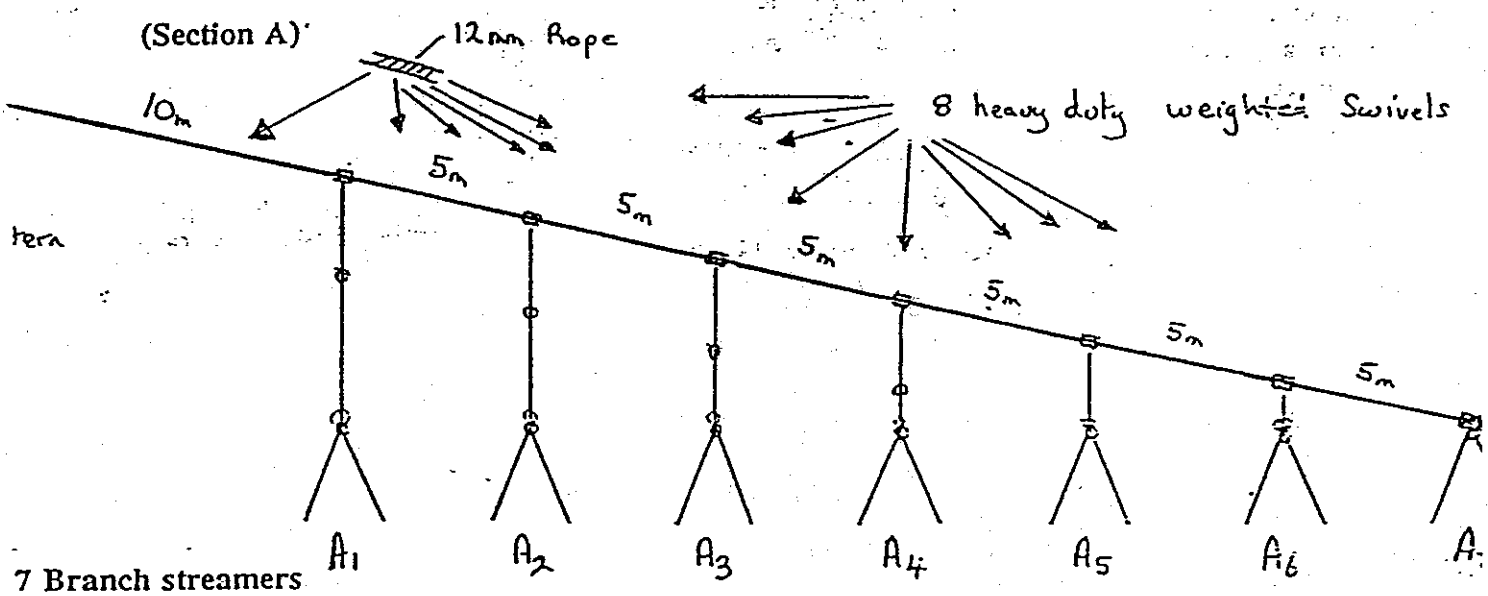


Figure 5. Section A of modified streamer line.

Swivel design for use on fixed towing point system. When streamer line is deployed from a basket situated on upper deck

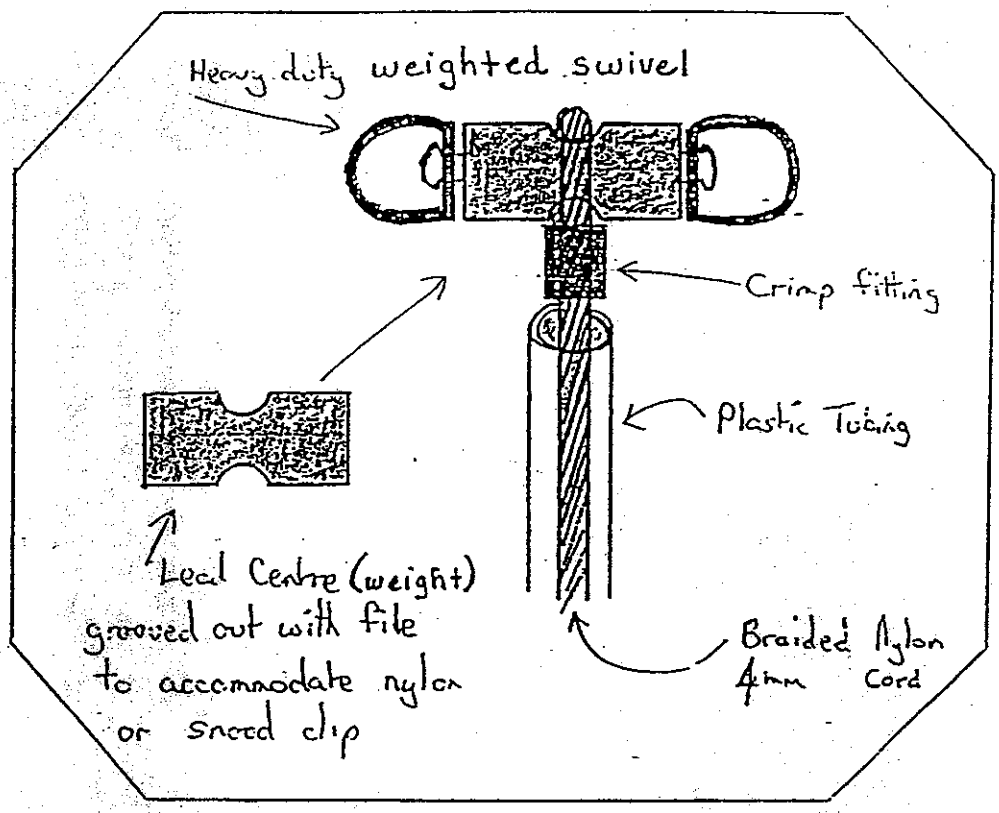
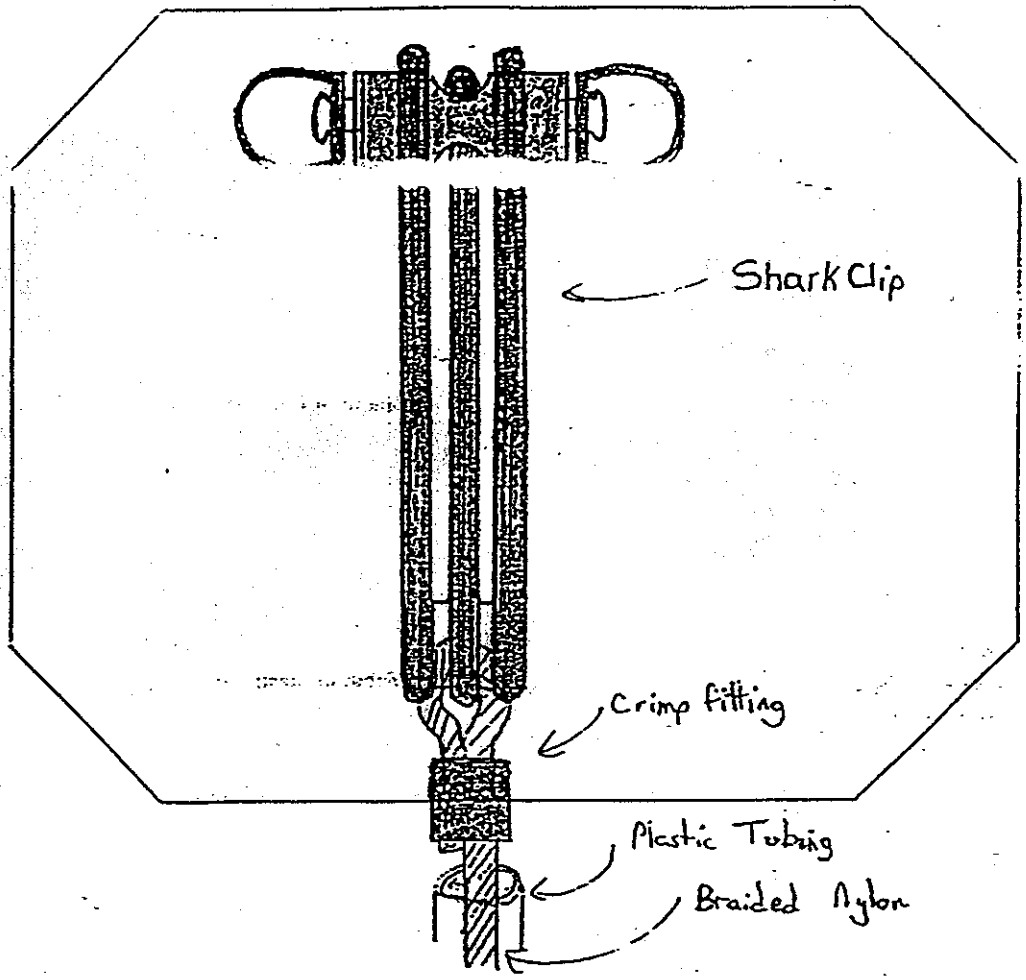
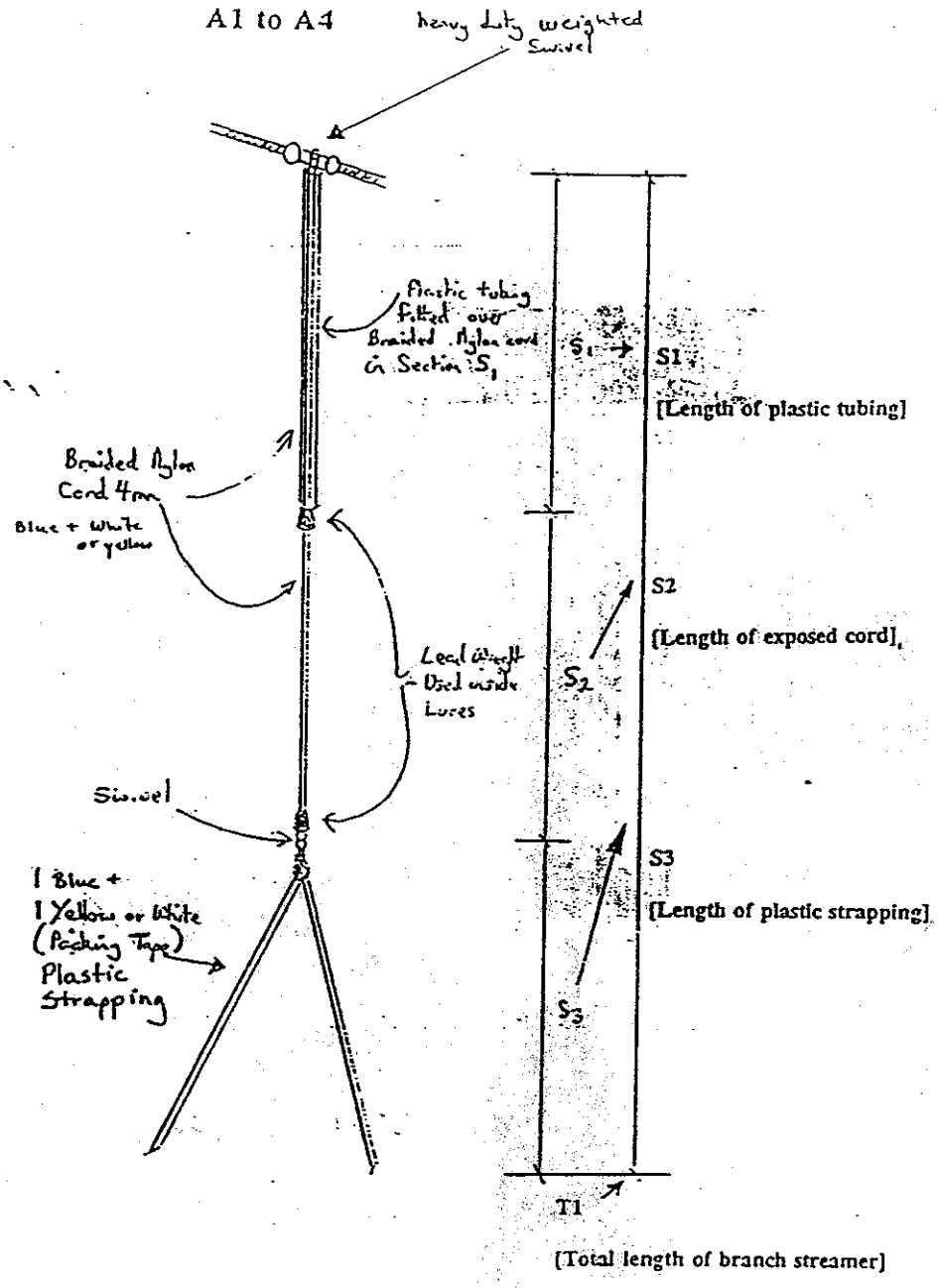


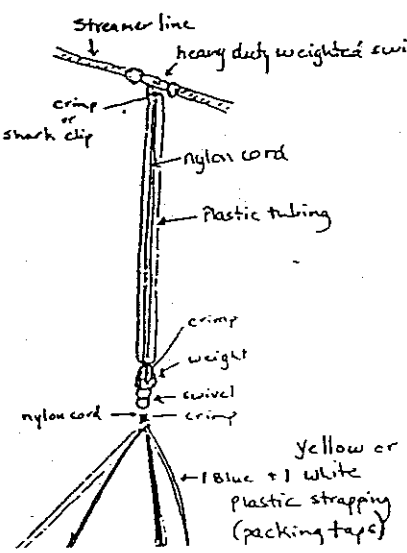
Figure 6. Streamer line swivel with crimp for permanent attachment of branch streamers, for use on a fixed towing point system.



Swivel design for use on a reel and pulley towing point system. When streamer line is deployed, swivels pass through pulley on pole and branch streamers A1 to A7 are clipped to each respective swivel. The reverse applies when winding up of streamer line.

Figure 7. Streamer line swivel with shark clip for attaching removable branch streamers, for use on a reel and pulley system.





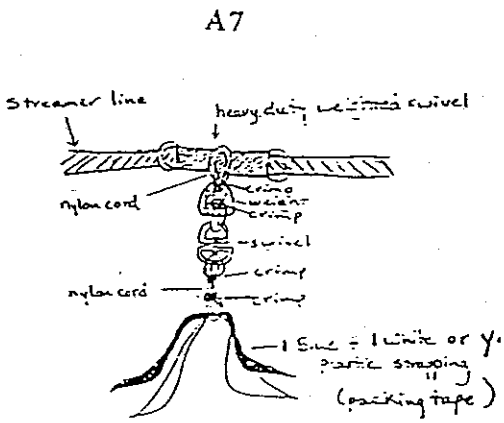


Figure 8. Branch streamer configurations.

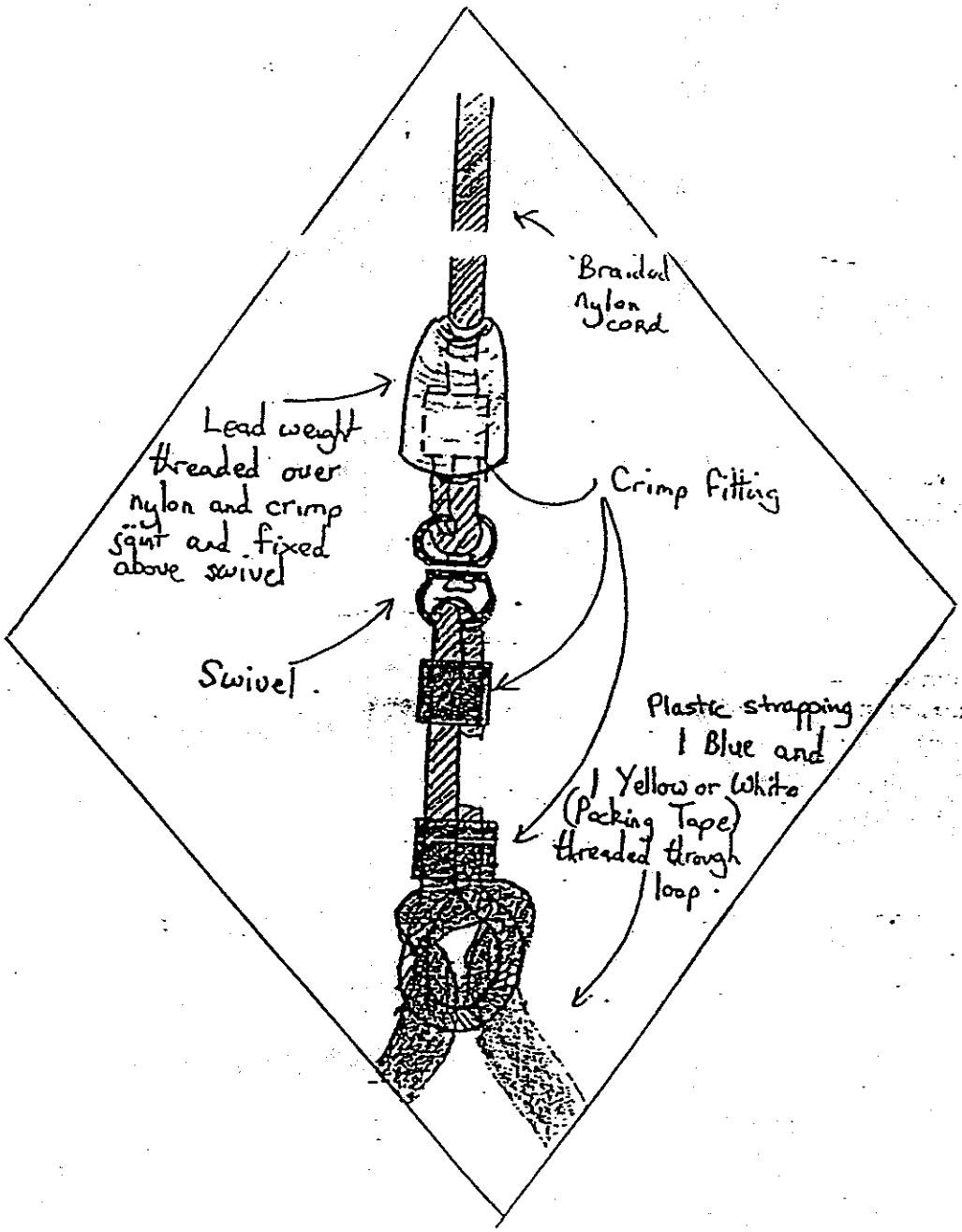


Figure 9. Attachment of plastic strapping in branch streamer configuration.

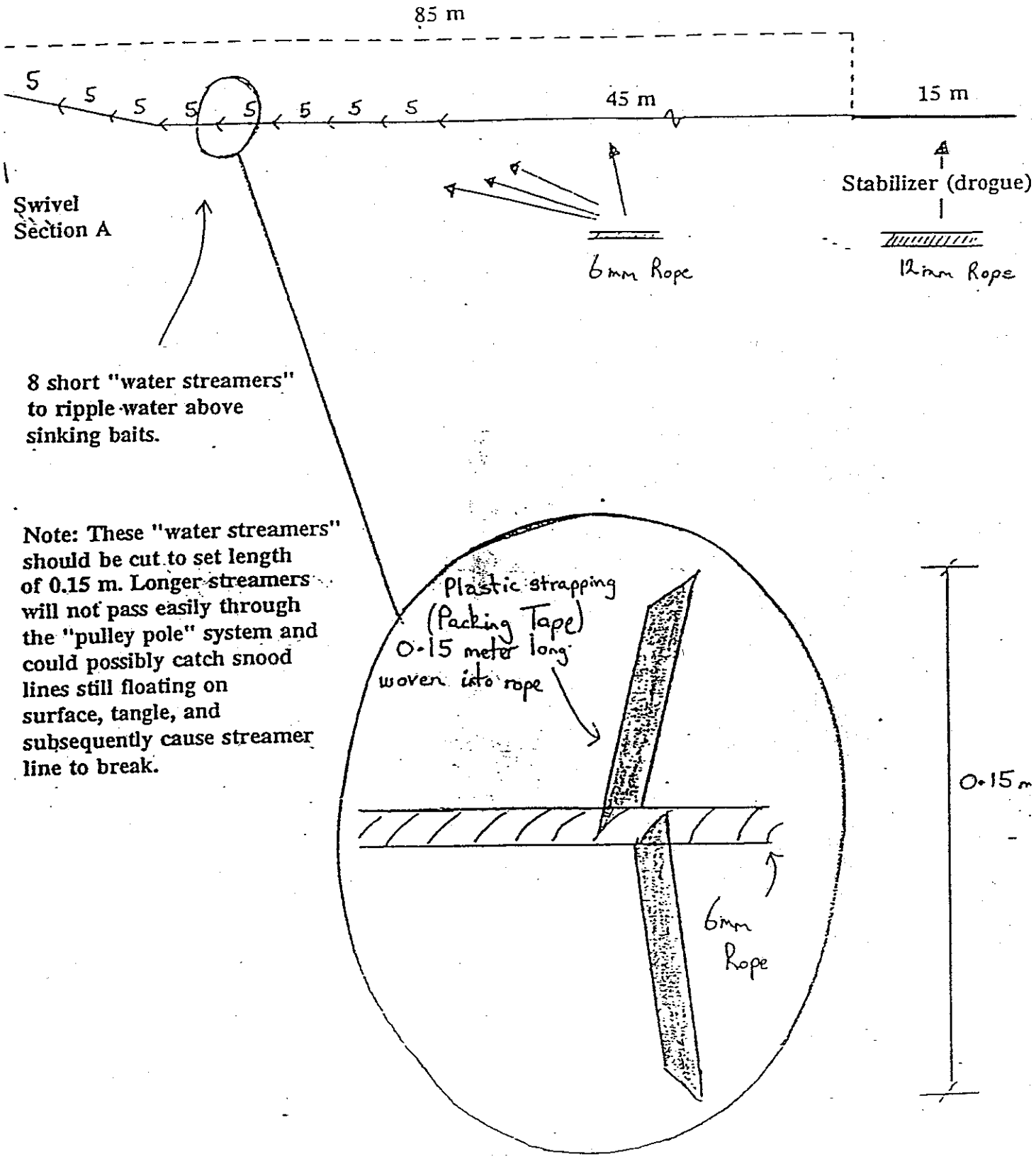


Figure 10. Section B of modified streamer line with water streamers and drogue end.

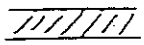
Table 1. Specifications for branch streamer components

All lengths in meters

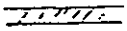
Branch streamer	A1	A2	A3	A4	A5	A6	A7
S1 [Length of plastic tubing]	1.0	1.0	1.0	0.75	0.75	0.25	---
S2 [Length of exposed cord]	1.0	0.75	0.5	0.5	---	---	---
S3 [Length of plastic strapping]	0.5	0.5	0.5	0.5	0.5	0.5	0.5
T1 [Total length of branch streamer]	2.5	2.25	2.0	1.75	1.25	0.75	0.5

Appendix 1. Materials needed for modified streamer line.

Total length from stern line = 140 meters



12 mm rope = 55 meters



6 mm rope = 85 meters

4 mm nylon braid (cord) = 8 meters

5-6 mm plastic tube = 5 meters

heavy duty weighted swivels = X 8

Standard swivel = X 7

lead weight (eg conical weights used in lures) = X 11

crimp fittings for joining 4 mm nylon cord = X 28

blue + white or yellow plastic strapping (eg bait carton packing tape) = 15 meters

(optional) shark clips = X 7

APPENDIX D: FISHERMAN QUESTIONNAIRES

FISHERMEN'S SEABIRD BYCATCH DETERRENT FEEDBACK FORM

Dear Hawaii longline fisherman,

Thank you for participating in the Western Pacific Regional Fisheries Management Council's Seabird Bycatch Reduction test project. Thousands of albatrosses are accidentally killed in this fishery each year. For centuries, mariners have revered the albatross for carrying omens of their fate. Your efforts to reduce bird bycatch are crucial to the survival of these albatrosses, the Hawaii Pelagic Longline Fishery, and your livelihood. Your feedback and suggestions concerning the techniques and devices we have been testing are valuable and will be incorporated into the recommendations we make to the Council. Please take the time to answer the questions in this survey as completely as possible. This is your opportunity to have input on the future of your fishery.

QUESTIONNAIRE: (If you need more space, write on the back.)

1) Do you believe it is important to reduce the number of seabirds caught by Hawaii's longline fishing fleets? Why, or why not?

2) What do you think will happen if seabird bycatch is not reduced in this fishery soon?

3) On this trip we have tested several different seabird deterrents: bird poles with streamers, towing buoys, not discarding bait and fish parts, etc. Which one was best at keeping the birds away from baited hooks? Why?

4) Which deterrent was the most difficult to use? Why?

5) Which deterrent was the easiest to use? Why?

6) What suggestions would you make for construction or deploying the bird pole with streamers?

7) What size or kinds of buoys would be best for scaring birds away from the baits on the set or haul?

8) How far behind the boat should they be towed to best keep the birds away from the baited hooks?

9) Did the birds behavior change when used baits and fish guts were not discarded until after the set or haul? How did they act?

10) Did any of the deterrents we tested affect the catch of your target species? How? Why?

11) What combination of techniques or equipment would be the easiest to use and keep the most birds from getting caught?

12) If you could tell the Western Pacific Regional Fisheries Management Council anything about how to reduce seabird bycatch, what would it be?

13) Let's face it! Something has to be done about seabird bycatch if the Hawaii Pelagic Longline Fishery is going to survive. What voluntary measures would longline fishermen comply with that will insure that seabirds are protected?

14) Please add any suggestions or comments.

All crew members aboard the 5 research trips were asked to participate in the survey.

- 18 of 25 crew members filled out and returned a survey to us.
- Tuna vessel: 4 of 5 crew members responded
- Swordfish vessels: 14 of 20 crew members responded
- Ethnic Breakdown: 5 Caucasians, 2 Pacific Islanders, 2 African Americans, and 9 Vietnamese

Q: Is seabird bycatch reduction important?

- TUNA CREW:
- 50% Yes
- 25% No
- 25% Left Blank

- SWORDFISH CREWS:
- 64%Yes
- 29% No
- 7% Left Blank

Q: What do you think will happen if seabird bycatch is not reduced?

- TUNA CREW:
- 50% Restricted Areas or Closures
- 25% Less Fish Landed
- 25% Food Chain Changes

- SWORDFISH CREWS:
- 36% Seabirds Go Extinct
- 29% Fishery Closure
- 21% Not Sure
- 7% Restrictions
- 7% Don't Care

Q: Which deterrent was most difficult to use?

- TUNA CREW:
- 75% Dyed Bait
- 25% Not Sure

- SWORDFISH CREWS:
- 21% Weighted Hooks
- 14% Tori Lines
- 14% Towed Buoy
- 14% Weighted Hooks/Towed Buoy
- 14% None
- 14% Left Blank
- 7% Dyed Baits

Q: Which deterrent was easiest to use?

- TUNA CREW:
- 50% Towed Buoy
- 25% Tori Line
- 25% Not Sure

- SWORDFISH CREWS
- 29% Towed Buoy
- 14% Dyed Baits
- 14% Tori Line/Dyed Baits
- 14% Towed Buoy/Dyed Baits
- 7% Tori Line
- 7% Set at Dark
- 7% Set at Dark w/Dyed Baits

Sldat20

Seabird Interaction Form for Data Entry: Master

Fixed parameters per set or haul:

Permit #:	929284
Trip #:	1
Set number:	3
Set or Haul:	set
Date:	09/07/98
Log page #:	134009
Target Species:	Bigeye Tuna

Environmental Conditions:

Wind Speed:	1
Vessel Speed:	8
Moon:	0
Sea Height (ft.):	0
Bait Condition:	2
Cloud Cover:	C
Swell Height (ft.):	0
Beaufort #:	2

Deterrent used during observation period:

Deterrent: no offal

Time of observation period:

Rec. from:	723
Rec. to:	753

Obs Duration: 30

Birds in the area during this observaition period:

BFA:	0
LA:	0
ST/O:	0

Behavioral Data:

		ATTEMPTS		INTERACTIONS			
species & zone	chases	landings	dives	contacts	hookings	entangle	morts
BFA (in BDZ):	0	0	0	0	0	0	0
BFA (out BDZ):	0	0	0	0	0	0	0
LA (in BDZ):	0	0	0	0	0	0	0
LA (out BDZ):	0	0	0	0	0	0	0
ST/O (in BDZ):	0	0	0	0	0	0	0
ST/O (out BDZ):	0	0	0	0	0	0	0

Comments:

Q: Which deterrent keeps birds away from hooks the best?

- TUNA CREW:
- 50% Tori Line and Towed Buoy
- 50% Not Sure

- SWORDFISH CREWS
- 29% Bird Scaring Line and Dyed Baits
- 21% Tori Line
- 14% Dyed Baits
- 14% Towed Buoy
- 7% Night Set w/Dyed Baits and Towed Buoy
- 7% All Were Good
- 7% None

Q: Did deterrents affect catch of target species?

- TUNA CREW:
- 75% No
- 25% Not Sure

- SWORDFISH CREWS
- 43% No
- 43% Not Sure
- 14% Maybe Dyed Baits

Q: What voluntary measures would fishermen comply with?

- TUNA CREW:
- 50% Left Blank
- 25% Tori Line

- SWORDFISH CREWS
- 29% Left Blank
- 29% Bird Scaring Line and Dyed Baits
- 14% Set at Dark
- 14% Other
- 7% Tori Line
- 7% Dyed Baits

SIdat18

Seabird Interaction Form for Data Entry: Master

Fixed parameters per set or haul:

Permit #:	929284
Trip #:	1
Set number:	3
Set or Haul:	set
Date:	09/07/98
Log page #:	134009
Target Species:	Bigeye Tuna

Environmental Conditions:

Wind Speed:	2
Vessel Speed:	8
Moon:	0
Sea Height (ft.):	0
Bait Condition:	2
Cloud Cover:	C
Swell Height (ft.):	4
Beaufort #:	2

Deterrent used during observation period:

Deterrent: control

Time of observation period:

Rec. from:	620
Rec. to:	650

Obs Duration: 30

Birds in the area during this observaition period:

BFA:	2.5
LA:	0
ST/O:	0

Behavioral Data:

		ATTEMPTS			INTERACTIONS		
species & zone	chases	landings	dives	contacts	hookings	entangle	morts
BFA (in BDZ):	0	0	0	0	0	0	0
BFA (out BDZ):	0	0	0	0	0	0	0
LA (in BDZ):	0	0	0	0	0	0	0
LA (out BDZ):	0	0	0	0	0	0	0
ST/O (in BDZ):	0	0	0	0	0	0	0
ST/O (out BDZ):	0	0	0	0	0	0	0

Comments:

APPENDIX E: QUALITATIVE SUMMARY TABLE

Qualitative analysis of the performance of mitigation measures during setting operations for Hawaii pelagic longline swordfish vessels.

Method	Strategy	Effects on bird behavior	Effects on fishing operations	Effect on CPUE of target species	Advantages	Disadvantages
Tori line and pole	Deterrent	Scares birds away from baited hooks Disrupts birds' flight pattern	Must be constantly monitored and maintained Compromises maneuverability of fishing vessel Possible entanglement with longline gear Safety concerns Distracts crew from fishing operations	Minimal	Forces birds to forage further behind boat, giving baits a chance to sink Protects baited hooks at the water's surface while they are accessible to birds Highly visible when deployed, presence on vessel can be verified visually for compliance Components can be easily purchased from local suppliers, and literature on construction and deployment in other fisheries is available Aerial streamers reach to the water surface and give more vertical protection of baited hooks Lack of terminal buoy reduces entanglements with fishing floats during line setting Using drogue instead of terminal buoy decreases entanglements	Covers only one side of mainline Only aerial portion of streamer line has maximum effectiveness (which is critical in covering Zone of Opportunity) Aerial portion covers less than half the Zone of Opportunity for vessels without mainline shooters Tori line must be close to mainline to cover area where baited hooks enter water Birds can carry branchlines over tori line, leading to entanglements/breakdowns Variation in vessel design in Hawaii longline fleet will require vessel-specific tori line/pole mounting Requires swiveling base to be fully effective in all circumstances Rough seas and high winds reduce effectiveness and increase risk of entanglement Birds can become habituated to tori line

Qualitative analysis of the performance of mitigation measures during setting operations for Hawaii pelagic longline swordfish vessels.

Method	Strategy	Effects on bird behavior	Effects on fishing operations	Effect on CPUE of target species	Advantages	Disadvantages
Towed buoy system	Deterrent	Scares birds away from baited hooks Disrupts flight pattern Bouncing action of buoy(s) can startle birds	Must be constantly monitored and maintained Distracts crew from fishing operations Safety concerns Compromises maneuverability of fishing vessel more than tori line Greater possibilities of entanglement with longline gear	Minimal	Protects baited hooks at waters' surface while they are accessible to birds Highly visible when deployed, presence on vessel can be monitored for compliance Bouncing deterrent has greater bird-scaring capacity than tori line Bouncing deterrent reduces bird habituation Towed buoy(s) add tension which keeps aerial portion up further behind vessel Shorter aerial streamers are less likely to entangle branchlines Less chance of entanglement between branchlines and aerial streamers Components can be easily purchased from local suppliers, and literature on construction and deployment in other fisheries is available Less expensive than tori line	Only covers one side of mainline Only aerial portion of streamer line has maximum effectiveness, (which is critical in covering Zone of Opportunity) Buoy line must be close to mainline to cover area where baited hooks enter water Requires swiveling base to be fully effective in all circumstances Variation in vessel design in Hawaii longline fleet will require vessel-specific buoy-line mounting Rough seas and high winds reduce effectiveness and increase risk of entanglement Birds can carry branchlines over buoy line, resulting in entanglements/breakdown More than one buoy is problematic End buoy is prone to entanglement with fishing gear Difficult to retrieve while under

Qualitative analysis of the performance of mitigation measures during setting operations for Hawaii pelagic longline swordfish vessels.

Method	Strategy	Effects on bird behavior	Effects on fishing operations	Effect on CPUE of target species	Advantages	Disadvantages
Strategic offal discards	Distraction	Uses behavioral response to distract birds from following the vessel and the baited hooks	Requires retention and preparation of offal from hauls for use on sets	Minimal	Method developed by pelagic longline fishermen; may have more intrinsic acceptance by fishermen Temporarily reduces bird abundance around the fishing vessel Distracts birds away from baited hooks No cost to fishermen Works in all weather conditions, no safety concerns	Requires modification of fishing practices and monitoring of bird abundance levels by crew Difficult to monitor for compliance When fish catch rate is low, offal may not be available

Qualitative analysis of the performance of mitigation measures during setting operations for Hawaii pelagic longline swordfish vessels.

Method	Strategy	Effects on bird behavior	Effects on fishing operations	Effect on CPUE of target species	Advantages	Disadvantages
No offal discards	Reduces attraction to vessel	Does not attract birds to fishing gear	Minimal	Minimal	Simple modification of fishing practices	Difficult to monitor for compliance Applicable mainly to hauls Project data shows that retaining offal increases attempts and interactions during hauls

Qualitative analysis of the performance of mitigation measures during setting operations for Hawaii pelagic longline swordfish vessels.

Method	Strategy	Effects on bird behavior	Effects on fishing operations	Effect on CPUE of target species	Advantages	Disadvantages
Blue-dyed Baits	Reduced visibility	Birds can not easily locate baited hooks once in the water	Requires some additional preparation time	No evidence of negative influence on CPUE of target species	Works in all weather conditions Inexpensive method No safety issues Dyeing thaws bait, which increases sink rate Requires minimal crew participation Method developed by pelagic longline fishermen; may have more intrinsic acceptance by fishermen Bait manufacturers may be able to provide pre-dyed bait and minimize enforcement problems	Some fishermen may resist this method on the assumption that it may have negative influence on catch rate Difficult to monitor compliance because it requires bait to be treated at sea Requires some extra handling of baits

Qualitative analysis of the performance of mitigation measures during setting operations for Hawaii pelagic longline swordfish vessels.

Method	Strategy	Effects on bird behavior	Effects on fishing operations	Effect on CPUE of target species	Advantages	Disadvantages
Night setting	Reduced visibility	Birds can not easily locate baited hooks in the dark	Reduces available setting options with regard to time and moon-phase	Limiting hours of setting time available may compromise optimal fishing (based on diurnal movements of target species)	Easily monitored for compliance by VMS technology Swordfish vessels commonly set at night; may have more intrinsic acceptance by fishermen Fishermen may not need to use towed deterrents after dark during setting operations Weather and sea condition are not a factor in effectiveness No cost incurred to vessels and requires no crew duties Minimal safety concerns	Would require modification of existing VMS program and additional hardware to monitor time of gear deployment For compliance monitoring purposes, specific latitudinal and longitudinal setting times will have be devised based upon nautical almanac VMS is not currently mandatory for vessels not leaving from, or landing fish in, Hawaii ports

APPENDIX F: SET DATA TABLES

Filename: T1Anal3

Purpose of this Analysis: To determine the effectiveness of the various deterrents for trip #1.

Method of the Analysis: The same as for trips 2,3,4 and 5. This trip is being analyzed separately because it was the only tuna trip that we observed.

SET DATA:

	Sl Notebk sheet#	Set or Haul	Trip #	Set #	Obs Dur (min)	Set Dur (min)	Total Hook #	Hooks per min	Hooks in obs per	Deter Type	BFA Attempts	LA Attempts	TOTAL Attempts	# BFA Present	# LA Present	TOTAL # Birds Present	BFA Attempts per Hook	LA Attempts per Hook	TOTAL Attempts per Hook	BFA Attempts per bird per hook	LA Attempts per bird per hook	TOTAL Attempts per bird per hook
	10	set	1	2	30	285	2313	8.12	243	Bouy	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
	8	set	1	2	30	285	2313	8.12	243	Control	2	0	2	2.5	0.0	2.5	0.008	0.000	0.008	0.00329		0.00329
	9	set	1	2	30	285	2313	8.12	243	Control	10	0	10	2.5	0.0	2.5	0.041	0.000	0.041	0.01643		0.01643
	18	set	1	3	30	265	2376	8.97	269	Control	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
	37	set	1	5	30	277	2251	8.13	244	Control	3	0	3	2.5	0.0	2.5	0.012	0.000	0.012	0.00492		0.00492
	38	set	1	5	31	277	2251	8.13	252	Control	25	0	25	2.5	0.0	2.5	0.099	0.000	0.099	0.03970		0.03970
	49	set	1	6	30	255	2333	9.15	274	Control	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
SUMS:					181				1526		40	0	40	15.0	0.0	15.0						
AVES:					30				254		6.7	0.0	6.7	2.5	0.0	2.5	0.027	0.000	0.027	0.01072		0.01072
	30	set	1	4	20	274	2265	8.27	165	Dyed	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
	34	set	1	4	30	274	2265	8.27	248	Dyed	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
	36	set	1	4	20	274	2265	8.27	165	Dyed	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
SUMS:					70				579		0	0	0	7.5	0.0	7.5						
AVES:					23				193		0.0	0.0	0.0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
	22	set	1	3	30	265	2376	8.97	269	No Offal	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
	24	set	1	3	30	265	2376	8.97	269	No Offal	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
	26	set	1	3	7	265	2376	8.97	63	No Offal	2	0	2	2.5	0.0	2.5	0.032	0.000	0.032	0.01275		0.01275
SUMS:					67				601		2	0	2	7.5	0.0	7.5						
AVES:					22				200		0.7	0.0	0.7	2.5	0.0	2.5	0.011	0.000	0.011	0.00425		0.00425
	39	set	1	5	30	277	2251	8.13	244	Tori	2	0	2	2.5	0.0	2.5	0.008	0.000	0.008	0.00328		0.00328
	40	set	1	5	30	277	2251	8.13	244	Tori	1	0	1	2.5	0.0	2.5	0.004	0.000	0.004	0.00164		0.00164
	41	set	1	5	30	277	2251	8.13	244	Tori	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
	42	set	1	5	30	277	2251	8.13	244	Tori	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
	43	set	1	5	30	277	2251	8.13	244	Tori	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
	44	set	1	5	30	277	2251	8.13	244	Tori	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
SUMS:					180				1463		3	0	3	15.0	0.0	15.0						
AVES:					30				244		0.5	0.0	0.5	2.5	0.0	2.5	0.002	0.000	0.002	0.00082		0.00082

HAUL DATA:

	Sl Notebk sheet#	Set or Haul	Trip #	Haul #	Obs Dur (min)	Haul Dur (min)	Total Hook #	Hooks per min	Hooks in obs per	Deter Type	BFA Attempts	LA Attempts	TOTAL Attempts	# BFA Present	# LA Present	TOTAL # Birds Present	BFA Attempts per Hook	LA Attempts per Hook	TOTAL Attempts per Hook	BFA Attempts per bird per hook	LA Attempts per bird per hook	TOTAL Attempts per bird per hook
	17	haul	1	2	19	595	2313	3.89	74	Control	0	0	0	2.5	2.5	5.0	0.000	0.000	0.000	0.00000	0.00000	0.00000
	27	haul	1	3	30	615	2376	3.86	116	No Offal	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
	28	haul	1	3	6	615	2376	3.86	23	No Offal	0	0	0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000
SUMS:					36				139		0	0	0	5.0	0.0	5.0						
AVES:					18				70		0.0	0.0	0.0	2.5	0.0	2.5	0.000	0.000	0.000	0.00000		0.00000

Filename: DetEff23

Date Analysis Begun: 6/4/99

Rationale of the Analysis: This analysis is for all the sets for trips 2,3,4 and 5. It will determine the effectiveness of the various mitigation devises against attempts, interactions and both combined for all these trips and all sets.

Key to Abreviations used in this Data Table:

- Dur = duration
- Obs = observation period
- Set # = A > one digit number in which the first digit is the set # for that trip and the remaining digits after the decimal place are the observation number a given period was for the set. "1.1" is the first observation period for the first set of trip x.
- Total Attempts = The total number of chases, landings and dives for all albatross species present during the observation period. Includes both "In BDZ" and "out BDZ" counts.
- Total Interacts = The total number of contacts, entanglements and hookings for all albatross species present during the observation period. Includes both "In BDZ" and "out BDZ" counts.
- Total Action per bird per hook = The total number of attempts and interactions divided by the total number of birds present divided by the total number of hooks in each period.

SITrip# Notebk Sheet #	Set or Haul	Trip #	Set #	Obs dur (min)	Set dur (min)	Total Hook #	Hooks per min	Hooks in obs per	Deter Type	BFA Attempts	LA Attempts	TOTAL Attempts	# BFA Present	# LA Present	TOTAL # Birds Present	BFA Attempts per Hook	LA Attempts per Hook	TOTAL Attempts per Hook	BFA Attempts per bird per hook	LA Attempts per bird per hook	TOTAL Attempts per bird per hook	BFA Interacts	LA Interacts	TOTAL Interacts	BFA Interacts per Hook	LA Interacts per Hook	TOTAL Interacts per Hook	BFA Interacts per bird per hook	LA Interacts per bird per hook	TOTAL Interacts per bird per hook	TOTAL ACTION per bird per hook
	set	2	2.1	28	233	885	3.8	106.4	Buoy	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.00000
	set	2	11.1	38	225	932	4.1	157.4	Buoy	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.00000
	set	2	17.2	32	255	1095	4.3	137.4	Buoy	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.00000
	set	2	17.3	30	255	1095	4.3	128.8	Buoy	4	0	4	2.50	0.00	2.50	0.031	0.000	0.031	0.01242		0.01242	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.01242
	set	2	17.4	9	255	1095	4.3	38.8	Buoy	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.00000
	set	3	4.2	10	303	605	2.0	20.0	Buoy	0	0	0	39.50	0.00	39.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.00000
	set	3	20.1	6	260	450	1.7	13.8	Buoy	0	0	0	12.00	9.50	21.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	set	4	3.1	30	330	934	2.8	84.9	Buoy	58	48	106	7.00	7.00	14.00	0.683	0.565	1.248	0.09758	0.08076	0.08917	19	15	34	0.22377	0.17666	0.40043	0.03197	0.02524	0.02860	0.11777
	set	4	3.2	18	330	934	2.8	50.9	Buoy	0	0	0	7.00	7.00	14.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	set	4	7.1	30	400	937	2.3	70.3	Buoy	32	133	165	7.00	32.00	39.00	0.455	1.893	2.348	0.06505	0.05914	0.06020	6	44	52	0.11384	0.62611	0.73995	0.01626	0.01957	0.01897	0.07918
	set	4	7.2	30	400	937	2.3	70.3	Buoy	14	169	183	4.75	32.00	36.75	0.199	2.405	2.604	0.04194	0.07515	0.07086	4	32	36	0.05692	0.45535	0.51227	0.01198	0.01423	0.01394	0.08480
	set	4	7.3	6	400	937	2.3	14.1	Buoy	0	41	41	2.50	24.50	27.00	0.000	2.917	2.917	0.00000	0.11907	0.10804	0	18	18	0.00000	1.28068	1.28068	0.00000	0.05227	0.04743	0.15547
	set	4	9.1	33	362	900	2.5	82.0	Buoy	27	4	31	2.50	2.50	5.00	0.329	0.049	0.378	0.13164	0.01950	0.07557	24	6	30	0.29253	0.07313	0.36566	0.11701	0.02925	0.07313	0.14870
	set	4	9.2	30	362	900	2.5	74.6	Buoy	4	0	4	2.50	2.50	5.00	0.054	0.000	0.054	0.02145	0.00000	0.01073	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01073
	set	4	9.3	10	362	900	2.5	24.9	Buoy	0	2	2	2.50	2.50	5.00	0.000	0.080	0.080	0.00000	0.03218	0.01609	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01609
	set	4	12.1	30	371	906	2.4	73.3	Buoy	42	47	89	24.50	12.00	36.50	0.573	0.642	1.215	0.02340	0.05346	0.03328	20	21	41	0.27299	0.28664	0.55964	0.01114	0.02389	0.01533	0.04862
765	set	5	3.0	30	360	1174	3.3	97.8	Buoy	1	99	100	2.50	25.75	28.25	0.010	1.012	1.022	0.00409	0.03930	0.03618	0	45	45	0.00000	0.45997	0.45997	0.00000	0.01786	0.01628	0.05246
780	set	5	4.0	30	305	917	3.0	90.2	Buoy	46	85	131	7.00	9.50	16.50	0.510	0.942	1.452	0.07286	0.09920	0.08802	29	34	63	0.32152	0.37695	0.69847	0.04593	0.03968	0.04233	0.13035
781	set	5	4.0	30	305	917	3.0	90.2	Buoy	35	118	153	7.00	14.50	21.50	0.388	1.308	1.696	0.05543	0.09022	0.07890	23	45	68	0.25500	0.49891	0.75391	0.03643	0.03441	0.03507	0.11398
782	set	5	4.0	5	305	917	3.0	15.0	Buoy	0	0	0	7.00	14.50	21.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
804	set	5	6.0	20	365	1147	3.1	62.8	Buoy	10	75	85	4.75	28.25	33.00	0.159	1.193	1.352	0.03350	0.04224	0.04098	2	37	39	0.03182	0.58871	0.62053	0.00670	0.02084	0.01880	0.05979
845	set	5	9.0	30	336	1020	3.0	91.1	Buoy	50	129	179	7.25	28.25	35.50	0.549	1.416	1.965	0.07573	0.05014	0.05537	36	71	107	0.39529	0.77961	1.17490	0.05452	0.02760	0.03310	0.08846
846	set	5	9.0	30	336	1020	3.0	91.1	Buoy	108	253	361	7.00	39.50	46.50	1.186	2.778	3.964	0.16941	0.07033	0.08525	35	96	131	0.38431	1.05412	1.43843	0.05490	0.02669	0.03093	0.11618
847	set	5	9.0	15	336	1020	3.0	45.5	Buoy	31	124	155	9.50	39.50	49.00	0.681	2.723	3.404	0.07168	0.06894	0.06947	14	51	65	0.30745	1.12000	1.42746	0.03236	0.02835	0.02913	0.09660
970	set	5	18.0	30	355	1260	3.5	106.5	Buoy	18	13	31	4.75	7.00	11.75	0.169	0.122	0.291	0.03559	0.01744	0.02478	11	9	20	0.10331	0.08452	0.18783	0.02175	0.01207	0.01599	0.04076
971	set	5	18.0	18	355	1260	3.5	83.9	Buoy	0	4	4	2.50	3.50	6.00	0.000	0.063	0.063	0.00000	0.01789	0.01044	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01044
SUMS:				810				1901.8		480	1344	1824	188.50	341.75	530.25							225	524	749							
AVES:				23				73.1		18	52	70	7.25	13.14	20.39	0.230	0.773	1.003	0.03507	0.04675	0.03714	9	20	29	0.10811	0.30236	0.40847	0.01696	0.01860	0.01612	0.05326
X 1000:																															
	set	2	1.1	30	208	980	4.7	141.3	Control	11	0	11	2.50	0.00	2.50	0.078	0.000	0.078	0.03113		0.03113	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.03113
	set	2	17.1	30	255	1095	4.3	128.8	Control	11	0	11	2.00	0.00	2.00	0.085	0.000	0.085	0.04269		0.04269	1	0	1	0.00776	0.00000	0.00776	0.00388		0.00388	0.04658
	set	2	17.5	30	255	1095	4.3	128.8	Control	52	0	52	7.50	0.00	7.50	0.404	0.000	0.404	0.05382		0.05382	13	0	13	0.10091	0.00000	0.10091	0.01346		0.01346	0.06728
	set	2	17.6	33	255	1095	4.3	141.7	Control	74	0	74	2.50	0.00	2.50	0.522	0.000	0.522	0.20888		0.20888	6	0	6	0.04234	0.00000	0.04234	0.01694		0.01694	0.22582
	set	2	18.1	31	184	920	5.0	155.0	Control	46	0	46	7.50	0.00	7.50	0.297	0.000	0.297	0.03957		0.03957	14	0	14	0.09032	0.00000	0.09032	0.01204		0.01204	0.05161
	set	2	18.2	10	184	920	5.0	50.0	Control	8	0	8	2.50	0.00	2.50	0.160	0.000	0.160	0.06400		0.06400	3	0	3	0.06000	0.00000	0.06000	0.02400		0.02400	0.08800
	set	3	1.1	20	312	821	2.0	39.8	Control	4	1	5	7.00	2.50	9.50	0.100	0.025	0.126	0.01435	0.01005	0.01322	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01322
	set	3	4.1	11	303	605	2.0	22.0	Control	51	0	51	25.75	2.50	28.25	2.322	0.000	2.322	0.09018	0.00000	0.08220	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.08220
	set	3	4.3	15	303	605	2.0	30.0	Control	152	0	152	57.00	0.00	57.00	5.075	0.000	5.075	0.08904		0.08904	25	0	25	0.83471	0.00000	0.83471	0.01464		0.01464	0.10368
	set	3	4.4	22	303	605	2.0	43.9	Control	52	0	52	32.00	0.00	32.00	1.184	0.000	1.184	0.03699		0.03699	4	0	4	0.09106	0.00000	0.09106	0.00285		0.00285	0.03984
	set	3	6.2	3	381	701	1.8	5.5	Control	0	0	0	7.00	0.00	7.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.00000
	set	3	8.1	7	352	860	1.9	13.1	Control	4	0	4	7.00	2.50	9.50	0.305	0.000	0.305	0.04354	0.00000	0.03208	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.03208
	set	3	16.1	16	83	145	1.7	31.4	Control	57	5	62	7.00	2.50	9.50	1.813	0.159	1.972	0.25895	0.06360	0.20754	8	1	9	0.25441	0.03180	0.28621	0.03634	0.01272	0.03013	0.23767
	set	3	19.3	7	123	378	3.1	21.5	Control	6	2	8	7.00	7.00	14.00	0.279	0.093	0.372	0.03984	0.01328	0.02656	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.02656
	set	4	2.4	30	314	974	3.1	93.1	Control	67	23	90	4.75	4.75	9.50	0.720	0.247	0.967	0.15158	0.05203	0.10180	34	14	48	0.36537	0.15044	0.51581	0.07692	0.03167	0.05430	0.15610
805	set	5	6.0	9	365	1147	3.1	28.3	Control	20	152	172	9.50	39.50	49.00	0.707	5.374	6.082	0.07444	0.13606	0.12411	17	86	103	0.60108	3.04078	3.64187	0.06327	0.07698	0.07432	0.19844
844	set	5	9.0	10	336	1020	3.0	30.4	Control	0	0	130	4.75	20.75	25.50	0.000	0.000	4.282	0.00000	0.00000	0.16794	1	3	98	0.03294	0.09882	3.22824	0.00693	0.00476	0.12660	0.29453
873	set	5	11.0	7	284	829	2.9	20.4	Control	31	24	55	12.00	12.00	24.00	1.517	1.175	2.692	0.12643	0.09788	0.11215	31	21	52	1.61715	1.02774	2.54489	0.12643	0.08565	0.10604	0.21819
875	set	5	11.0	5	284	829	2.9	14.6	Control	7	20	27	9.50	12.00	21.50	0.480	1.370	1.850	0.05049	0.11419	0.08604	22	20	42	1.50738	1.37033	2.87768	0.15867	0.11419	0.13385	0.21989
927	set	5	14.0	14	361	1086	3.0	42.1	Control	49	23	72	12.00	7.00	19.00	1.163	0.546	1.710	0.09695	0.07802	0.08998	38	22	60	0.90226	0.52236	1.42463	0.07519	0.07462	0.07498	0.16496
956	set	5	17.0	9	355	1178	3.3	29.9	Control	0	0	0	2.50	2.50	5.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SUMS:				351				1211.7		702	250	1082	229.25	115.50	344.75							217	167	478							
AVES:				17				57.7		33	12	52	10.92	5.50	16.42	0.820	0.428	1.452	0.07204	0.04709	0.07666	10	8	23	0.30513	0.29725	0.74983	0.03007	0.03338	0.03276	0.10942
X 1000:																															
	set	2	3.1	31	232	842	3.6	112.5	Dyed	3	0	3	7.50	0.00	7.50	0.027	0.000	0.027	0.00356		0.00356	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.00356
	set	2	3.2	5	232	842	3.6	18.1	Dyed	3	0	3	7.50	0.00	7.50	0.165	0.000	0.165	0.02204		0.02204	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.02204
	set	2	16.1	27	225	899	4.0	107.9	Dyed	1	0	1	2.50	0.00	2.50	0.009	0.000	0.009	0.00371		0.00371	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.00371
	set	3	5.1	19	361	673	1.9	35.4	Dyed	5	0	5	7.00	0.00	7.00	0.141	0.000	0.141	0.02017		0.02017	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.02017
	set	3	9.1	31	353	718	2.0	63.1	Dyed	4	0	4	4.75	0.00	4.75	0.063	0.000	0.063	0.01336		0.01336	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.01336
	set	3	9.2	11	353	718	2.0	22.4	Dyed	0	0	0	7.00	0.00	7.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.00000
	set	3	19.1	30	123	378	3.1	92.2	Dyed	11	15	26	7.00	7.00	14.00	0.119	0.163	0.282	0.01704	0.02324	0.02014	0	2	2	0.00000	0.02169	0.02169	0.00000	0.00310	0.00155	0.02169
	set	3	19.2	21	123	378	3.1	64.5	Dyed	3	3	6	7.00	7.00	14.00	0.046	0.046	0.093	0.00664	0.00664	0.00664	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00664
	set	3	21.1	30	287	569	2.0	59.5	Dyed	49	26	74	12.00	9.50	21.50	0.824	0.420	1.244	0.06865	0.04425	0.05787	1	1	2	0.01681	0.01681	0.03363	0.00140	0.00177	0.00156	0.05943
	set	3	21.2	19	287	569	2.0	37.7	Dyed	19	23	42	12.00	12.00	24.00	0.504	0.611	1.115	0.04203	0.05088	0.04646	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.04646
	set	4	2.1	30	314	974	3.1	93.1	Dyed	5	0	5	2.50	0.00	2.50	0.054	0.000	0.054	0.02149		0.02149	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.02149
	set	4	2.2	30	314	974	3.1	93.1	Dyed	25	7	32	7.00	3.50	10.50	0.269	0.075	0.344	0.03838	0.02149	0.03275	1	0	1	0.01075	0.00000	0.01075	0.00154	0.00000	0.00102	0.03377
	set	4	2.3	16	314	974	3.1	49.8	Dyed	8	5	13	4.75	4.75	9.50	0.161	0.101	0.262	0.03393	0.02121	0.02757	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.02757
	set	4	2.5	14	314	974	3.4	43.4	Dyed	0	0	0	2.50	2.50	5.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12.00	26.75	37.75	1.100	2.111	3.211	0.09167	0.08196	0.08505	1	26	27	0.01279	0.33258	0.34537	0.00107	0.01292	0.00915	0.09420

	set	4	5.2	37	373	972	2.6	96.4	Dyed	21	240	261	12.00	39.50	51.50	0.216	2.489	2.707	0.01815	0.06302	0.05256	0	27	27	0.00000	0.28003	0.28003	0.00000	0.00709	0.00544	0.05800		
	set	4	5.3	30	373	972	2.6	78.2	Dyed	42	247	289	7.00	39.50	46.50	0.537	3.159	3.697	0.07675	0.07999	0.07950	7	30	37	0.08954	0.38374	0.47329	0.01279	0.00972	0.01018	0.08988		
	set	4	5.4	16	373	972	2.6	41.7	Dyed	30	287	317	7.00	57.00	64.00	0.720	6.883	7.603	0.10279	0.12076	0.11880	20	180	200	0.47968	4.31713	4.79681	0.06853	0.07574	0.07495	0.19375		
	set	4	8.1	30	405	900	2.2	66.7	Dyed	22	35	57	2.50	12.00	14.50	0.330	0.525	0.855	0.13200	0.04375	0.05697	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.05897		
	set	4	8.2	30	405	900	2.2	66.7	Dyed	31	42	73	7.00	14.50	21.50	0.465	0.630	1.095	0.06643	0.04348	0.05093	13	23	36	0.19500	0.34500	0.54000	0.02786	0.02379	0.02512	0.07605		
	set	4	8.3	29	405	900	2.2	64.4	Dyed	30	82	112	7.00	14.50	21.50	0.466	1.272	1.738	0.06650	0.08778	0.08083	16	24	40	0.24626	0.37241	0.62069	0.03547	0.02566	0.02887	0.10970		
730	set	5	1.0	30	361	1037	2.9	86.2	Dyed	12	151	163	3.50	13.50	17.00	0.139	1.752	1.891	0.03979	0.12979	0.11126	3	25	28	0.03481	0.29010	0.32491	0.00995	0.02149	0.01911	0.13037		
731	set	5	1.0	30	361	1037	2.9	86.2	Dyed	70	234	304	7.00	24.50	31.50	0.812	2.715	3.526	0.11604	0.11083	0.11199	12	65	77	0.13925	0.75426	0.89351	0.01989	0.03079	0.02837	0.14035		
732	set	5	1.0	16	361	1037	2.9	46.0	Dyed	12	44	56	4.75	20.75	25.50	0.261	0.957	1.218	0.05497	0.04614	0.04778	0	10	10	0.00000	0.21757	0.21757	0.00000	0.01049	0.00853	0.05631		
733	set	5	1.0	30	361	1037	2.9	86.2	Dyed	6	105	111	2.50	32.00	34.50	0.070	1.218	1.288	0.02785	0.03808	0.03733	4	22	26	0.04642	0.25529	0.30170	0.01857	0.00798	0.00875	0.04606		
734	set	5	1.0	30	361	1037	2.9	86.2	Dyed	8	29	37	2.50	24.50	27.00	0.093	0.337	0.429	0.03713	0.01374	0.01590	1	1	2	0.01160	0.01160	0.02321	0.00464	0.00047	0.00086	0.01676		
735	set	5	1.0	7	361	1037	2.9	20.1	Dyed	2	8	10	2.50	12.00	14.50	0.099	0.398	0.497	0.03979	0.03315	0.03430	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.03430		
791	set	5	5.0	30	233	726	3.1	93.6	Dyed	18	69	87	4.75	9.50	14.25	0.193	0.738	0.931	0.04054	0.07770	0.06531	10	19	29	0.10698	0.20326	0.31024	0.02252	0.02140	0.02177	0.08708		
806	set	5	8.0	30	365	1147	3.1	94.3	Dyed	13	85	98	9.50	39.50	49.00	0.138	0.902	1.040	0.01452	0.02283	0.02121	7	22	29	0.07425	0.23336	0.30761	0.00782	0.00591	0.00628	0.02749		
807	set	5	8.0	30	365	1147	3.1	94.3	Dyed	27	185	212	7.00	32.00	39.00	0.286	1.962	2.249	0.04091	0.06132	0.05766	9	50	59	0.09547	0.53037	0.62584	0.01364	0.01657	0.01605	0.07371		
808	set	5	8.0	11	365	1147	3.1	34.6	Dyed	0	0	0	7.00	20.75	27.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		
871	set	5	11.0	30	284	829	2.9	87.6	Dyed	20	17	37	12.00	4.75	16.75	0.228	0.194	0.423	0.01903	0.04087	0.02522	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.02522		
872	set	5	11.0	37	284	829	2.9	108.0	Dyed	28	15	43	12.00	4.75	16.75	0.259	0.139	0.398	0.02160	0.02924	0.02377	1	0	1	0.00928	0.00000	0.00928	0.00077	0.00000	0.00055	0.02432		
874	set	5	11.0	24	284	829	2.9	70.1	Dyed	4	22	26	7.00	12.00	19.00	0.057	0.314	0.371	0.00816	0.02617	0.01953	0	1	1	0.00000	0.01427	0.01427	0.00000	0.00119	0.00075	0.02028		
876	set	5	11.0	30	284	829	2.9	87.6	Dyed	13	22	35	7.00	4.75	11.75	0.146	0.251	0.400	0.02121	0.05289	0.03402	0	1	1	0.00000	0.01142	0.01142	0.00000	0.00240	0.00097	0.03499		
877	set	5	11.0	13	284	829	2.9	37.9	Dyed	3	0	3	7.00	2.50	9.50	0.079	0.000	0.079	0.01129	0.00000	0.00832	1	0	1	0.02835	0.00000	0.02835	0.00376	0.00000	0.00277	0.01110		
SUMS:				594				2503.2		634	2162	2796	241.50	506.75	748.25									107	529	636								
AVES:				25				89.5		18	60	78	6.71	14.08	20.78	0.252	0.843	1.096	0.03717	0.04728	0.03933	3	15	18	0.04437	0.23864	0.28300	0.00695	0.00960	0.00757	0.04691		
X 1000:																																	
802	set	5	8.0	30	365	1147	3.1	94.3	dyed/buoy	5	32	37	4.75	12.00	16.75	0.053	0.339	0.392	0.01117	0.02829	0.02343	0	1	1	0.00000	0.01081	0.01081	0.00000	0.00088	0.00063	0.02406		
803	set	5	8.0	30	365	1147	3.1	94.3	dyed/buoy	0	21	21	4.75	14.50	19.25	0.000	0.223	0.223	0.00000	0.01536	0.01157	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01157		
	set	2	4.1	30	214	879	4.1	123.2	No Offal	13	0	13	2.00	0.00	2.00	0.105	0.000	0.105	0.05275		0.05275	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.05275		
	set	2	4.2	21	214	879	4.1	86.3	No Offal	19	0	19	2.50	0.00	2.50	0.220	0.000	0.220	0.08811		0.08811	5	0	5	0.05797	0.00000	0.05797	0.02319		0.02319	0.11130		
761	set	5	3.0	30	380	1174	3.3	97.8	SOD	0	4	4	0.00	15.75	15.75	0.000	0.041	0.041		0.00260	0.00260	0	2	2	0.00000	0.02044	0.02044		0.00130	0.00130	0.00389		
762	set	5	3.0	30	380	1174	3.3	97.8	SOD	0	37	37	2.50	9.50	12.00	0.000	0.378	0.378	0.00000	0.03981	0.03152	0	11	11	0.00000	0.11244	0.11244	0.00000	0.01184	0.00937	0.04089		
763	set	5	3.0	25	380	1174	3.3	81.5	SOD	0	108	108	0.00	17.00	17.00	0.000	1.325	1.325		0.07792	0.07792	0	62	62	0.00000	0.76048	0.76048		0.04473	0.04473	0.12266		
764	set	5	3.0	30	380	1174	3.3	97.8	SOD	9	131	140	1.25	28.25	29.50	0.092	1.339	1.431	0.07359	0.04740	0.04851	2	74	76	0.02044	0.75639	0.77683	0.01635	0.02677	0.02633	0.07484		
825	set	5	7.0	30	260	1103	4.2	127.3	SOD	0	34	34	7.25	9.50	16.75	0.000	0.267	0.267	0.00000	0.02812	0.01595	0	23	23	0.00000	0.16072	0.16072	0.00000	0.01902	0.01079	0.02674		
826	set	5	7.0	30	260	1103	4.2	127.3	SOD	0	88	88	2.50	18.25	20.75	0.000	0.691	0.691	0.00000	0.03789	0.03332	0	54	54	0.00000	0.42430	0.42430	0.00000	0.02325	0.02045	0.05377		
827	set	5	7.0	18	260	1103	4.2	76.4	SOD	0	13	13	1.25	9.50	10.75	0.000	0.170	0.170	0.00000	0.01792	0.01584	0	10	10	0.00000	0.13096	0.13096	0.00000	0.01376	0.01218	0.02602		
925	set	5	14.0	30	361	1086	3.0	90.2	SOD	0	6	6	2.50	2.50	5.00	0.000	0.066	0.066	0.00000	0.02659	0.01330	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01330		
926	set	5	14.0	28	361	1086	3.0	84.2	SOD	22	13	35	9.50	7.00	16.50	0.261	0.154	0.416	0.02749	0.02205	0.02518	6	12	18	0.07123	0.14246	0.21369	0.00750	0.02035	0.01295	0.03813		
SUMS:				251				880.4		31	434	465	26.75	117.25	144.00									8	248	256								
AVES:				28				97.8		3	48	52	2.97	13.03	16.00	0.039	0.492	0.532	0.01444	0.03337	0.02935	1	28	28	0.01019	0.28091	0.29109	0.00341	0.01789	0.01535	0.04469		
X 1000:																																	
	set	2	5.1	11	215	891	4.1	45.6	Tori	47	0	47	17.50	0.00	17.50	1.031	0.000	1.031	0.05892		0.05892	3	0	3	0.06581	0.00000	0.06581	0.00376		0.00376	0.06268		
	set	2	15.1	61	239	895	3.7	228.4	Tori	54	0	54	17.50	2.50	20.00	0.236	0.000	0.236	0.01351	0.00000	0.01182	9	0	9	0.03940	0.00000	0.03940	0.00225	0.00000	0.00197	0.01379		
	set	3	6.1	28	381	701	1.8	51.5	Tori	7	0	7	9.50	0.00	9.50	0.136	0.000	0.136	0.01430		0.01430	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000	0.01430		
	set	3	7.1	30	395	770	1.9	56.5	Tori	56	0	56	24.50	0.00	24.50	0.958	0.000	0.958	0.03908		0.03908	4	0	4	0.06840	0.00000	0.06840	0.00279		0.00279	0.04188		
	set	3	20.2	30	260	450	1.7	51.9	Tori	28	45	73	9.50	14.50	24.00	0.539	0.867	1.406	0.05676	0.09977	0.05858	2	7	9	0.03852	0.13481	0.17333	0.00405	0.00930	0.00722	0.06560		
	set	3	20.3	10	260	450	1.7	17.3	Tori	0	0	0	2.50	9.50	12.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000		
	set	4	1.1	30	350	928	2.7	79.5	Tori	21	2	23	4.75	0.00	4.75	0.264	0.025	0.289	0.05558		0.06087	7	3	10	0.08800	0.03772	0.12572	0.01853		0.02647	0.08734		
	set	4	1.2	16	350	928	2.7	42.4	Tori	25	0	25	4.75	0.00	4.75	0.589	0.000	0.589	0.12406		0.12406	11	0	11	0.25929	0.00000	0.25929	0.05459		0.05459	0.17855		
	set	4	6.1	27	371	937	2.5	68.2	Tori	15	54	69	7.00	18.25	25.25	0.220	0.792	1.012	0.03142	0.04339	0.04007	0	5	5	0.00000	0.07332	0.07332	0.00000	0.00402	0.00290	0.04298		
	set	4	6.2	30	371	937	2.5	75.8	Tori	36	96	132	9.50	20.75	30.25	0.475	1.267	1.742	0.05001	0.06106	0.05759	9	22	31	0.11878	0.29036	0.40914	0.01250	0.01389	0.01353	0.07112		
	set	4	10.1	30	380	832	2.3	69.3	Tori	89	32	121	15.75	9.50	25.25	1.284	0.462	1.745	0.08150	0.04858	0.06912	50	16	66	0.72115	0.23077	0.95192	0.04579	0.02429	0.03770	0.10682		
	set	4	10.2	18	380	832	2.3	41.6	Tori	10	4	14	7.00	2.50	9.50	0.240	0.096	0.337	0.03434	0.03846	0.03543	9	7	16	0.21635	0.16827	0.38462	0.03081	0.06731	0.04049	0.07591		
751	set	5	2.0	30	242	773	3.2	95.8	Tori	60	188	248	14.50	24.50	39.00	0.835	1.753	2.588	0.05758	0.07156	0.06636	50	58	108	0.52178	0.60526	1.12704	0.03598	0.02470	0.02890	0.09526		
841	set	5	8.0	30	282	851	3.0	90.5	Tori	3	125	128	1.25	28.25	29.50	0.033	1.381	1.414	0.02651	0.04888	0.04793	0	33	33	0.00000	0.36451	0.36451	0.00000	0.01290	0.01236	0.06028		
842	set	5	8.0	30	282	851	3.0	90.5	Tori	0	436	436	1.25	62.25	63.50	0.000	4.838	4.838	0.00000	0.07772	0.07619	0	158	158	0.00000	1.74524	1.74524	0.00000	0.02804	0.02748	0.10387		
843	set	5	8.0	13	282	851	3.0	39.2	Tori	0	30	30	na	45.75	45.75	0.000	0.765	0.765		0.01671	0.01671	0	0	0	0.00000	0.00000	0.00000		0.00000	0.00000	0.01671		
890	set	5	12.0	30	359	1202	3.3	100.4	Tori	16	8	24	2.50	2.50	5.00	0.159	0.080	0.239	0.03168	0.04779	0.04779	1	0	1	0.00996	0.00000	0.00996	0.00398	0.00000	0.00199	0.04978		
891	set	5	12.0	30	359	1202	3.3	100.4	Tori	8	2	10	2.50	2.50	5.00	0.080	0.020	0.100	0.03186	0.00796	0.01991	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01991		
905	set	5	13.0	30	297	1153	3.9	116.5	Tori	4	34	38	4.75	4.75	9.50	0.034	0.292	0.326	0.00723	0.06146	0.03435	5	10	15	0.04293	0.08586	0.12879	0.00904	0.01808	0.01356	0.04790		
906	set	5	13.0	16	297	1153	3.9	62.1	Tori	11	43	54	7.00	7.00	14.00	0.177	0.692	0.869	0.02530	0.09890	0.06210	10	23	33	0.18099	0.37028	0.53128	0.02300	0.05290	0.03795	0.10005		
SUMS:				530				1525.7		510	1081	1591	163.50	255.00	418.50									170	342	512								
AVES:				27				76.3		26	54	80	8.18	12.75	20.93	0.365	0.666	1.031	0.04062	0.04442	0.04706	9	17	26	0.11757	0.20532	0.32289	0.01301	0.01704	0.01568	0.06274		
X 1000:																																	

Filename: DetMort1

Date Analysis Begun: 6/4/99

Rationale of the Analysis: This analysis is for all the sets for trips 2,3,4 and 5. It will determine the effectiveness of the various mitigation devises against mortalities per unit effort (BPUE = Mortalities per hook). This analysis includes only morts that occurred during observed (light) periods. Since no # of bird present counts can be made in the dark and since controls in the dark are not the same as controls in the light (since darkness is a deterrent in itself) the effect of dark versus light, and hence all controls in darkness will be analyzed separately (DarkMort) and compared to morts during lighted controls.

Key to Abreviaitons used in this Data Table:

Dur = duration

Obs = observation period

Set # = A > one digit number in which the first digit is the set # for that trip and the remaining digits after the decimal place are the observation number a given period was for the set. "1.1" is the first observation period for the first set of trip x.

Total Attempts = The total number of chases, landings and dives for all albatross species present during the observation period. Includes both "In BDZ" and "out BDZ" counts.

Total Interacts = The total number of contacts, entanglements and hookings for all albatross species present during the observation period. Includes both "in BDZ" and "out BDZ" counts.

SiTrip# Notebk Sheet #	Set or Haul	Trip #	Set #	Obs ur (min)	Set ur (min	Total Hook #	Hooks per min	Hooks in obs per	Deter Type	Light Cond	BFA Morts	LA Morts	TOTAL Morts	# BFA Present	# LA Present	TOTAL # Birds Present	BFA Morts per Hook	LA Morts per Hook	TOTAL Morts per Hook	BFA Morts per bird per Hook	LA Morts per bird per Hook	TOTAL Morts per bird per Hook	Comments
	set	2	2.1	26	233	885	3.8	106.4	Buoy		0	0	0	2.50	0.00	2.50	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	2	11.1	38	225	932	4.1	157.4	Buoy		0	0	0	7.50	0.00	7.50	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	2	17.2	32	255	1095	4.3	137.4	Buoy		0	0	0	2.50	0.00	2.50	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	2	17.3	30	255	1095	4.3	128.8	Buoy		0	0	0	2.50	0.00	2.50	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	2	17.4	9	255	1095	4.3	38.6	Buoy		0	0	0	2.50	0.00	2.50	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	3	4.2	10	303	605	2.0	20.0	Buoy		0	0	0	39.50	0.00	39.50	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	3	20.1	8	260	450	1.7	13.8	Buoy		0	0	0	12.00	9.50	21.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
	set	4	3.1	30	330	934	2.8	84.9	Buoy	Light	1	0	1	7.00	7.00	14.00	0.01178	0.00000	0.01178	0.00168	0.00000	0.00084	
	set	4	3.2	18	330	934	2.8	50.9	Buoy		0	0	0	7.00	7.00	14.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
	set	4	7.1	30	400	937	2.3	70.3	Buoy	Light	1	2	3	7.00	32.00	39.00	0.01423	0.02846	0.04269	0.00203	0.00089	0.00109	
	set	4	7.2	30	400	937	2.3	70.3	Buoy		0	0	0	4.75	32.00	36.75	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
	set	4	7.3	6	400	937	2.3	14.1	Buoy		0	0	0	2.50	24.50	27.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
	set	4	9.1	33	362	900	2.5	82.0	Buoy		0	0	0	2.50	2.50	5.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
	set	4	9.2	30	362	900	2.5	74.6	Buoy		0	0	0	2.50	2.50	5.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
	set	4	9.3	10	362	900	2.5	24.9	Buoy		0	0	0	2.50	2.50	5.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
	set	4	12.1	30	371	906	2.4	73.3	Buoy		0	0	0	24.50	12.00	36.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
765	set	5	3.0	30	360	1174	3.3	97.8	Buoy		0	0	0	2.50	25.75	28.25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
780	set	5	4.0	30	305	917	3.0	90.2	Buoy	Light	2	2	4	7.00	9.50	16.50	0.02217	0.02217	0.04435	0.00317	0.00233	0.00269	
781	set	5	4.0	30	305	917	3.0	90.2	Buoy		0	0	0	7.00	14.50	21.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
782	set	5	4.0	5	305	917	3.0	15.0	Buoy		0	0	0	7.00	14.50	21.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
804	set	5	8.0	20	365	1147	3.1	62.8	Buoy		0	0	0	4.75	28.25	33.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
845	set	5	9.0	30	336	1020	3.0	91.1	Buoy	Light	1	3	4	7.25	28.25	35.50	0.01098	0.03294	0.04392	0.00151	0.00117	0.00124	
846	set	5	9.0	30	336	1020	3.0	91.1	Buoy		0	0	0	7.00	39.50	46.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
847	set	5	9.0	15	336	1020	3.0	45.5	Buoy		0	0	0	9.50	39.50	49.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
970	set	5	18.0	30	355	1260	3.5	106.5	Buoy	Light	1	0	1	4.75	7.00	11.75	0.00939	0.00000	0.00939	0.00198	0.00000	0.00080	
971	set	5	18.0	18	355	1260	3.5	63.9	Buoy		0	0	0	2.50	3.50	6.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
SUMS:				610				1901.8			6	7	13										
AVES:				23				73.1			0	0	1	7.25	13.14	20.39	0.00264	0.00321	0.00585	0.00040	0.00022	0.00026	
AVES X 1000:																	2.63665	3.21441	5.85105	0.39903	0.21948	0.25616	
	set	2	1.1	30	208	980	4.7	141.3	Control		0	0	0	2.50	0.00	2.50	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	2	17.1	30	255	1095	4.3	128.8	Control	Light	1	0	1	2.00	0.00	2.00	0.00778	0.00000	0.00778	0.00388		0.00388	
	set	2	17.5	30	255	1095	4.3	128.8	Control		0	0	0	7.50	0.00	7.50	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	2	17.6	33	255	1095	4.3	141.7	Control		0	0	0	2.50	0.00	2.50	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	2	18.1	31	184	920	5.0	155.0	Control		0	0	0	7.50	0.00	7.50	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	2	18.2	10	184	920	5.0	50.0	Control		0	0	0	2.50	0.00	2.50	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	3	1.1	20	312	621	2.0	39.8	Control		0	0	0	7.00	2.50	9.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
	set	3	4.1	11	303	605	2.0	22.0	Control	Light	4	0	4	25.75	2.50	28.25	0.18212	0.00000	0.18212	0.00707	0.00000	0.00645	
	set	3	4.3	15	303	605	2.0	30.0	Control		0	0	0	57.00	0.00	57.00	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	3	4.4	22	303	605	2.0	43.9	Control		0	0	0	32.00	0.00	32.00	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	3	6.2	3	381	701	1.8	5.5	Control		0	0	0	7.00	0.00	7.00	0.00000	0.00000	0.00000	0.00000		0.00000	
	set	3	6.1	7	352	660	1.9	13.1	Control		0	0	0	7.00	2.50	9.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
	set	3	18.1	18	83	145	1.7	31.4	Control	Light	1	0	1	7.00	2.50	9.50	0.03180	0.00000	0.03180	0.00454	0.00000	0.00335	
	set	3	19.3	7	123	378	3.1	21.5	Control		0	0	0	7.00	7.00	14.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
	set	4	2.4	30	314	974	3.1	93.1	Control	Light	4	0	4	4.75	4.75	9.50	0.04298	0.00000	0.04298	0.00905	0.00000	0.00452	
	set	4	9.0	5	362	900	2.5	12.4	Control	Light	1	0	1	2.50	2.50	5.00	0.08044	0.00000	0.08044	0.03218	0.00000	0.01609	Mort on 1st Hook as BM was
805	set	5	6.0	9	365	1147	3.1	28.3	Control	Light	1	2	3	9.50	39.50	49.00	0.03536	0.07072	0.10607	0.00372	0.00179	0.00216	
844	set	5	9.0	10	336	1020	3.0	30.4	Control	Light	1	3	4	4.75	20.75	25.50	0.03294	0.09882	0.13176	0.00693	0.00476	0.00517	Dark Mort was a BFA
873	set	5	11.0	7	284	829	2.9	20.4	Control	Light	3	0	3	12.00	12.00	24.00	0.14682	0.00000	0.14682	0.01224	0.00000	0.00612	
875	set	5	11.0	5	284	829	2.9	14.6	Control		0	0	0	9.50	12.00	21.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	
927	set	5	14.0	14	361	1086	3.0	42.1	Control	Light	0	1	1	12.00	7.00	19.00	0.00000	0.02374	0.02374	0.00000	0.00339	0.00125	Light Mort was a LA
958	set	5	17.0	9	355	1178	3.3	29.9	Control		0	0	0	2.50	2.50	5.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	

SUMS:				356				1224.1			16	6	22										
AVES:				16				55.6			0.727	0.273	1	10.53	5.36	15.90	0.02547	0.00879	0.03425	0.00362	0.00076	0.00223
AVES X 1000:																	25.46502	8.78560	34.25062	3.61890	0.76499	2.22673
		set	2	3.1	31	232	842	3.6	112.5	Dyed		0	0	0	7.50	0.00	7.50	0.00000	0.00000	0.00000	0.00000		0.00000
		set	2	3.2	5	232	842	3.6	18.1	Dyed		0	0	0	7.50	0.00	7.50	0.00000	0.00000	0.00000	0.00000		0.00000
		set	2	16.1	27	225	899	4.0	107.9	Dyed		0	0	0	2.50	0.00	2.50	0.00000	0.00000	0.00000	0.00000		0.00000
		set	3	5.1	19	361	673	1.9	35.4	Dyed		0	0	0	7.00	0.00	7.00	0.00000	0.00000	0.00000	0.00000		0.00000
		set	3	9.1	31	353	718	2.0	63.1	Dyed		0	0	0	4.75	0.00	4.75	0.00000	0.00000	0.00000	0.00000		0.00000
		set	3	9.2	11	353	718	2.0	22.4	Dyed		0	0	0	7.00	0.00	7.00	0.00000	0.00000	0.00000	0.00000		0.00000
		set	3	19.1	30	123	378	3.1	92.2	Dyed		0	0	0	7.00	7.00	14.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	3	19.2	21	123	378	3.1	64.5	Dyed		0	0	0	7.00	7.00	14.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	3	21.1	30	287	569	2.0	59.5	Dyed		0	0	0	12.00	9.50	21.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	3	21.2	19	287	569	2.0	37.7	Dyed		0	0	0	12.00	12.00	24.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	4	2.1	30	314	974	3.1	93.1	Dyed		0	0	0	2.50	0.00	2.50	0.00000	0.00000	0.00000	0.00000		0.00000
		set	4	2.2	30	314	974	3.1	93.1	Dyed		0	0	0	7.00	3.50	10.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	4	2.3	16	314	974	3.1	49.6	Dyed		0	0	0	4.75	4.75	9.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	4	2.5	14	314	974	3.1	43.4	Dyed		0	0	0	2.50	2.50	5.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	4	5.1	30	373	972	2.6	78.2	Dyed	Light	0	3	3	12.00	25.75	37.75	0.00000	0.03837	0.03837	0.00000	0.00149	0.00102
		set	4	5.2	37	373	972	2.6	96.4	Dyed		0	0	0	12.00	39.50	51.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	4	5.3	30	373	972	2.6	78.2	Dyed		0	0	0	7.00	39.50	46.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	4	5.4	16	373	972	2.6	41.7	Dyed		0	0	0	7.00	57.00	64.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	4	8.1	30	405	900	2.2	66.7	Dyed	Light	1	0	1	2.50	12.00	14.50	0.01500	0.00000	0.01500	0.00600	0.00000	0.00103
		set	4	8.2	30	405	900	2.2	66.7	Dyed		0	0	0	7.00	14.50	21.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	4	8.3	29	405	900	2.2	64.4	Dyed		0	0	0	7.00	14.50	21.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	730	set	5	1.0	30	361	1037	2.9	86.2	Dyed	Light	0	2	2	3.50	13.50	17.00	0.00000	0.02321	0.02321	0.00000	0.00172	0.00137
	731	set	5	1.0	30	361	1037	2.9	86.2	Dyed		0	0	0	7.00	24.50	31.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	732	set	5	1.0	16	361	1037	2.9	46.0	Dyed		0	0	0	4.75	20.75	25.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	733	set	5	1.0	30	361	1037	2.9	86.2	Dyed		0	0	0	2.50	32.00	34.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	734	set	5	1.0	30	361	1037	2.9	86.2	Dyed		0	0	0	2.50	24.50	27.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	735	set	5	1.0	7	361	1037	2.9	20.1	Dyed		0	0	0	2.50	12.00	14.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	791	set	5	5.0	30	233	726	3.1	93.5	Dyed	Light	1	0	1	4.75	9.50	14.25	0.01070	0.00000	0.01070	0.00225	0.00000	0.00075
	806	set	5	6.0	30	365	1147	3.1	94.3	Dyed		0	0	0	9.50	39.50	49.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	807	set	5	6.0	30	365	1147	3.1	94.3	Dyed		0	0	0	7.00	32.00	39.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	808	set	5	6.0	11	365	1147	3.1	34.6	Dyed		0	0	0	7.00	20.75	27.75	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	871	set	5	11.0	30	284	829	2.9	87.6	Dyed		0	0	0	12.00	4.75	16.75	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	872	set	5	11.0	37	284	829	2.9	108.0	Dyed		0	0	0	12.00	4.75	16.75	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	874	set	5	11.0	24	284	829	2.9	70.1	Dyed		0	0	0	7.00	12.00	19.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	876	set	5	11.0	30	284	829	2.9	87.6	Dyed		0	0	0	7.00	4.75	11.75	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	877	set	5	11.0	13	284	829	2.9	37.9	Dyed		0	0	0	7.00	2.50	9.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SUMS:					894				2503.2			2	5	7									
AVES:					25				69.5			0.056	0.139	0.194	6.71	14.08	20.78	0.00071	0.00171	0.00242	0.00023	0.00011	0.00012
AVES X 1000:																		0.71383	1.71062	2.42445	0.22923	0.11067	0.11575
	802	set	5	6.0	30	365	1147	3.1	94.3	dyed/buoy		0	0	0	4.75	12.00	16.75	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	803	set	5	6.0	30	365	1147	3.1	94.3	dyed/buoy		0	0	0	4.75	14.50	19.25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SUMS:					60				188.5			0	0	0									
AVES:					30				94.3			0	0	0	4.75	13.25	18.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
AVES X 1000:																		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	2	4.1	30	214	879	4.1	123.2	No Offal		0	0	0	2.00	0.00	2.00	0.00000	0.00000	0.00000	0.00000		0.00000
		set	2	4.2	21	214	879	4.1	86.3	No Offal		0	0	0	2.50	0.00	2.50	0.00000	0.00000	0.00000	0.00000		0.00000
SUMS:					51				209.5			0	0	0									
AVES:					26				104.7			0	0	0	2.25	0.00	2.25	0.00000	0.00000	0.00000	0.00000		0.00000
AVES X 1000:																		0.00000	0.00000	0.00000	0.00000		0.00000
	761	set	5	3.0	30	360	1174	3.3	97.8	SOD	Light	0	1	1	0.00	15.75	15.75	0.00000	0.01022	0.01022		0.00065	0.00065
	762	set	5	3.0	30	360	1174	3.3	97.8	SOD		0	0	0	2.50	9.50	12.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	763	set	5	3.0	25	360	1174	3.3	81.5	SOD		0	0	0	0.00	17.00	17.00	0.00000	0.00000	0.00000		0.00000	0.00000
	764	set	5	3.0	30	360	1174	3.3	97.8	SOD		0	0	0	1.25	28.25	29.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	825	set	5	7.0	30	260	1103	4.2	127.3	SOD		0	0	0	7.25	9.50	16.75	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	826	set	5	7.0	30	260	1103	4.2	127.3	SOD		0	0	0	2.50	18.25	20.75	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	827	set	5	7.0	18	260	1103	4.2	76.4	SOD		0	0	0	1.25	9.50	10.75	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	925	set	5	14.0	30	361	1086	3.0	90.2	SOD	Light	1	0	1	2.50	2.50	5.00	0.01108	0.00000	0.01108	0.00443	0.00000	0.00222
	926	set	5	14.0	28	361	1086	3.0	84.2	SOD		0	0	0	9.50	7.00	16.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SUMS:					251				880.4			1	1	2									
AVES:					28				97.8			0.111	0.111	0.222	2.97	13.03	16.00	0.00123	0.00114	0.00237	0.00063	0.00007	0.00032
AVES X 1000:																		1.23116	1.13572	2.36688	0.63317	0.07211	0.31834
		set	2	5.1	11	215	891	4.1	45.6	Tori	Light	1	0	1	17.50	0.00	17.50	0.02194	0.00000	0.02194	0.00125		0.00125
		set	2	15.1	61	239	895	3.7	228.4	Tori		0	0	0	17.50	2.50	20.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	3	6.1	28	381	701	1.8	51.5	Tori	Light	1	0	1	9.50	0.00	9.50	0.01941	0.00000	0.01941	0.00204		0.00204
		set	3	7.1	30	395	770	1.9	58.5	Tori		0	0	0	24.50	0.00	24.50	0.00000	0.00000	0.00000	0.00000		0.00000
		set	3	20.2	30	260	450	1.7	51.9	Tori	Light	0	2	2	9.50	14.50	24.00	0.00000	0.03852	0.03852	0.00000	0.00266	0.00160
		set	3	20.3	10	260	450	1.7	17.3	Tori		0	0	0	2.50	9.50	12.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		set	4	1.1	30	350	928	2.7	79.5	Tori	Light	0	1	1	4.75	0.00	4.75	0.00000	0.01257	0.01257	0.00000		0.00265
		set	4	1.2	16	350	928	2.7	42.4	Tori		0	0	0	4.75	0.00	4.75	0.00000	0.00000	0.00000	0.00000		0.00000
		set	4	6.1	27	371	937	2.5	68.2	Tori		0	0	0	7.00	18.25	25.25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

	set	4	6.2	30	371	937	2.5	75.8	Tori		0	0	0	9.50	20.75	30.25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
	set	4	10.1	30	360	832	2.3	69.3	Tori	Light	1	0	1	15.75	9.50	25.25	0.01442	0.00000	0.01442	0.00092	0.00000	0.00057
	set	4	10.2	18	360	832	2.3	41.6	Tori		0	0	0	7.00	2.50	9.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
751	set	5	2.0	30	242	773	3.2	95.8	Tori	Light	1	1	2	14.50	24.50	39.00	0.01044	0.01044	0.02087	0.00072	0.00043	0.00054
841	set	5	8.0	30	282	851	3.0	90.5	Tori	Light	0	2	2	1.25	28.25	29.50	0.00000	0.02209	0.02209	0.00000	0.00078	0.00075
842	set	5	8.0	30	282	851	3.0	90.5	Tori		0	0	0	1.25	62.25	63.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
843	set	5	8.0	13	282	851	3.0	39.2	Tori		0	0	0	0.00	45.75	45.75	0.00000	0.00000	0.00000		0.00000	0.00000
890	set	5	12.0	30	359	1202	3.3	100.4	Tori		0	0	0	2.50	2.50	5.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
891	set	5	12.0	30	359	1202	3.3	100.4	Tori		0	0	0	2.50	2.50	5.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
905	set	5	13.0	30	297	1153	3.9	116.5	Tori		0	0	0	4.75	4.75	9.50	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
906	set	5	13.0	18	297	1153	3.9	82.1	Tori		0	0	0	7.00	7.00	14.00	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SUMS:				530				1525.7			4	6	10									
AVES:				27				76.3			0.2	0.3	0.5	8.18	12.75	20.93	0.00331	0.00418	0.00749	0.00026	0.00026	0.00047
AVES X 1000:																	3.31031	4.18086	7.49119	0.25959	0.25763	0.47018

APPENDIX G: HAUL DATA TABLES

SUMS				3539				6802.11		3427	3494	6916	2910.00	1414.50	4324.50															
MEANS				29				55.76		78.0497	78.6393	56.6885	23.85	11.59	35.45	0.488342	0.572111	1.010453	0.023012	0.027169	0.025577	1.45087	1.59016	3.04098	0.02607	0.02964	0.05571	0.00127	0.00138	0.0013
852	Haul	5	16	30	288	889	2.88	89.50	o offal/buo	0	1	1	12.00	17.00	29.00	0.000	0.011	0.011	0.00000	0.00086	0.00039	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
853	Haul	5	16	30	288	889	2.88	89.50	o offal/buo	0	0	0	12.00	20.75	32.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
107	Haul	2	1	30	693	980	1.41	42.47	Tori	0	0	0	12.50	0.00	12.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
169	Haul	2	5	32	405	891	2.20	70.40	Tori	2	0	2	17.50	0.00	17.50	0.078	0.000	0.078	0.00162		0.00167	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
170	Haul	2	5	29	405	891	2.20	63.80	Tori	23	0	23	12.50	2.50	15.00	0.361	0.000	0.361	0.02884	0.00000	0.02403	2	0	2	0.03135	0.00000	0.03135	0.00251	0.00000	0.0020
172	Haul	2	5	30	405	891	2.20	66.00	Tori	20	0	20	25.00	2.50	27.50	0.303	0.000	0.303	0.01212	0.00000	0.01102	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
173	Haul	2	5	20	405	891	2.20	44.00	Tori	0	0	0	7.50	2.50	10.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
174	Haul	2	5	22	405	891	2.20	48.40	Tori	5	0	5	17.50	0.00	17.50	0.103	0.000	0.103	0.00590		0.00590	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
175	Haul	2	5	30	405	891	2.20	66.00	Tori	0	0	0	25.00	0.00	25.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
180	Haul	2	5	30	405	891	2.20	66.00	Tori	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
181	Haul	2	5	34	405	891	2.20	74.80	Tori	0	0	0	12.50	2.50	15.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
217	Haul	2	9	30	302	684	2.26	67.95	Tori	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
218	Haul	2	9	34	302	684	2.26	77.01	Tori	0	0	0	17.50	0.00	17.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
219	Haul	2	9	30	302	684	2.26	67.95	Tori	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
222	Haul	2	9	30	302	684	2.26	67.95	Tori	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
223	Haul	2	9	34	302	684	2.26	77.01	Tori	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
224	Haul	2	9	27	302	684	2.26	61.15	Tori	0	0	0	12.50	0.00	12.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
264	Haul	2	13	30	401	914	2.28	68.38	Tori	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
265	Haul	2	13	30	401	914	2.28	68.38	Tori	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
268	Haul	2	13	32	401	914	2.28	72.94	Tori	0	0	0	25.00	0.00	25.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
269	Haul	2	13	30	401	914	2.28	68.38	Tori	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
270	Haul	2	13	30	401	914	2.28	68.38	Tori	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
271	Haul	2	13	30	401	914	2.28	68.38	Tori	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
273	Haul	2	13	30	401	914	2.28	68.38	Tori	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
274	Haul	2	13	34	401	914	2.28	77.50	Tori	1	0	1	7.50	0.00	7.50	0.015	0.000	0.015	0.00172		0.00172	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
322	Haul	2	19	43	413	1049	2.54	109.22	Tori	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
337	Haul	3	1	30	425	621	1.46	43.84	Tori	0	0	0	14.50	0.00	14.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
338	Haul	3	1	30	425	621	1.46	43.84	Tori	0	0	0	12.00	0.00	12.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
339	Haul	3	1	30	425	621	1.46	43.84	Tori	0	0	0	9.75	0.00	9.75	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
341	Haul	3	1	33	425	621	1.46	48.22	Tori	0	0	0	12.00	2.50	14.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
342	Haul	3	1	33	425	621	1.46	48.22	Tori	0	0	0	20.75	2.50	23.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
343	Haul	3	1	30	425	621	1.46	43.84	Tori	0	0	0	15.75	0.00	15.75	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
344	Haul	3	1	30	425	621	1.46	43.84	Tori	0	0	0	9.50	0.00	9.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
345	Haul	3	1	9	425	621	1.46	13.15	Tori	0	0	0	12.00	0.00	12.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
381	Haul	3	5	30	515	673	1.31	39.20	Tori	0	0	0	39.50	0.00	39.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
382	Haul	3	5	30	515	673	1.31	39.20	Tori	0	0	0	39.50	0.00	39.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
384	Haul	3	5	30	515	673	1.31	39.20	Tori	0	0	0	24.50	0.00	24.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
385	Haul	3	5	32	515	673	1.31	41.82	Tori	0	0	0	24.50	0.00	24.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
386	Haul	3	5	30	515	673	1.31	39.20	Tori	0	0	0	32.00	0.00	32.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
387	Haul	3	5	30	515	673	1.31	39.20	Tori	0	0	0	57.00	0.00	57.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
388	Haul	3	5	30	515	673	1.31	39.20	Tori	0	0	0	39.50	0.00	39.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
389	Haul	3	5	29	515	673	1.31	37.90	Tori	0	0	0	39.50	0.00	39.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
390	Haul	3	5	6	515	673	1.31	7.84	Tori	0	0	0	23.25	2.50	25.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
451	Haul	3	10	14	558	760	1.36	19.07	Tori	0	0	0	20.75	0.00	20.75	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
452	Haul	3	10	15	558	760	1.36	20.43	Tori	4	0	4	57.00	4.75	61.75	0.196	0.000	0.196	0.00343	0.00000	0.00317	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
453	Haul	3	10	30	558	760	1.36	40.86	Tori	0	0	0	39.50	2.50	42.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
454	Haul	3	10	30	558	760	1.36	40.86	Tori	0	0	0	24.50	2.50	27.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
456	Haul	3	10	18	558	760	1.36	24.52	Tori	0	0	0	15.75	2.50	18.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
457	Haul	3	10	28	558	760	1.36	38.14	Tori	0	0	0	12.00	2.50	14.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
458	Haul	3	10	28	558	760	1.36	38.14	Tori	0	0	0	25.75	2.50	28.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
492	Haul	3	14	33	370	523	1.41	46.65	Tori	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
493	Haul	3	14	32	370	523	1.41	45.23	Tori	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
494	Haul	3	14	33	370	523	1.41	46.65	Tori	0	0	0	4.75	0.00	4.75	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
495	Haul	3	14	28	370	523	1.41	39.58	Tori	0	0	0	4.75	0.00	4.75	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
496	Haul	3	14	30	370	523	1.41	42.41	Tori	0	0	0	7.00	2.50	9.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
498	Haul	3	14	30	370	523	1.41	42.41	Tori	0	0	0	13.50	2.50	16.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
499	Haul	3	14	30	370	523	1.41	42.41	Tori	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
500	Haul	3	14	5	370	523	1.41	7.07	Tori	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
528	Haul	3	18	30	109	145	1.33	39.91	Tori	26	57	83	18.25	15.75	34.00	0.651	1.478	2.080	0.03570	0.09068	0.06117	0	2	2	0.00000	0.05011	0.05011	0.00000	0.00318	0.0014
529	Haul	3	18	32	109	145	1.33	42.57	Tori	7	15	22	24.50	24.50	49.00	0.164	0.352	0.517	0.00671	0.01438	0.01056	0	10	10	0.00000	0.23491	0.23491	0.00000	0.00958	0.0047
530	Haul	3	18	32	109	145	1.33	42.57	Tori	0	0	0	39.50	25.75	65.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
567	Haul	4	1	30	475	928	1.95	58.61	Tori	0	0	0	15.75	2.50	18.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
568	Haul	4	1	30	475	928	1.95	58.61	Tori	0	0	0	9.50	2.50	12.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
569	Haul	4	1	30	475	928	1.95	58.61	Tori	0	0	0	7.00	2.50	9.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
571	Haul	4	1	30	475	928	1.95	58.61	Tori	0	0	0	13.50	4.75	18.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
572	Haul	4	1	30	475	928	1.95	58.61	Tori	0	0	0	2.50	2.50	5.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
573	Haul	4	1	30	475	928	1.95	58.61	Tori	0	0	0	4.75	2.50	7.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
575	Haul	4	1	30	475	928	1.95	58.61	Tori	0	0	0	4.75	4.75	9.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
576	Haul	4	1	30	475	928	1.95	58.61	Tori	0	0	0	12.00	7.00	19.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
578	Haul	4	1	4	475	928	1.95	7.81	Tori	0	0	0	7.00	7.00	14.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
629	Haul	4	5	30	581	972	1.67	50.19	Tori	0	0	0	12.00	24.50	36.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
630	Haul	4	5	24	581	972	1.67	40.15	Tori	0	0	0	14.50	32.00	46.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
631	Haul	4	5	30	581	972	1.67	50.19	Tori	0	0	0	20.75	24.50	45.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
632	Haul	4	5	30	581	972	1.67	50.19	Tori	0	2	2	24.50	32.00	56.50	0.000	0.040	0.040	0.00000	0.00125	0.00071	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
633	Haul	4	5	30	581	972	1.67	50.19	Tori	0	0	0	20.75	32.00	52.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
636	Haul	4	5	30	581	972	1.67	50.19	Tori	0	2	2	39.50	39.50	79.00	0.000	0.040	0.040	0.00000	0.00101	0.00050	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
642	Haul	4	8	30	533	837	1.57	47.01	Tori	0	0	0	12.00	32.00	44.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
643	Haul	4	8	30	533	837	1.57	47.01	Tori	0	0	0	12.00	32.00	44.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
645	Haul	4	8	30	533	837	1.57	47.01	Tori	0	0	0	9.50	24.50	34.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
646	Haul	4	8	30	533	837	1.57	47.01	Tori	0	0	0	7.00	17.00	24.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
647	Haul	4	8	30	533	837	1.57	47.01	Tori	0	0	0	7.00	32.00	39.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
649	Haul	4	8	30	533	837	1.57	47.01	Tori	0	0	0	7.00	32.00	39.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
650	Haul	4	8	14	533	837	1.57	21.94	Tori	0	0	0	7.00	32.00	39.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
652	Haul	4	8	30	533	837	1.57	47.01	Tori	0	0	0	9.50	32.00	41.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
653	Haul	4	8	29	533	837	1.57	45.44	Tori	0	0	0	7.00	39.50	46.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
654	Haul	4	8	24	533	837	1.57	37.61	Tori	0	1	1	9.50	57.00	66.50	0.000	0.077	0.077	0.00000	0.00047	0.00040	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
700	Haul	4	10	30	463	832	1.80	53.91	Tori	0	0	0	39.50	2.50	42.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
701	Haul	4	10	20	463	832	1.80	35.94	Tori	0	0	0	57.00	9.50	66.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
702	Haul	4	10	30	463	832	1.80	53.91	Tori	13	0	13	57.00	14.50	71.50	0.241	0.000	0.241	0.00423	0.00000	0.00337	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
703	Haul	4	10	30	463	832	1.80	53.91	Tori	0	0	0	74.50	12.00	86.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
704	Haul	4	10	30	463	832	1.80	53.91	Tori	0	0	0	74.50	14.50	89.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
705	Haul	4	10	31	463	832	1.80	55.71	Tori	0	0	0	57.00	14.50	71.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
707	Haul	4	10	29	463	832	1.80	52.11	Tori	1	0	1	74.50	12.00	86.50	0.019	0.000	0.019	0.00026	0.00000	0.00022	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
708	Haul	4	10	30	463	832	1.80	53.91	Tori	0	0	0	57.00	17.00	74.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
752	Haul	5	2	30	390	773	1.98	59.46	Tori	2	6	8	37.50	37.50	75.00	0.034	0.101	0.135	0.00090	0.00268	0.00178	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
753	Haul	5	2	30	390	773	1.98	59.46	Tori	0	3	3	38.75	38.75	77.50	0.000	0.050	0.050	0.00000	0.00130	0.00065	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
754	Haul	5	2	30	390	773	1.98	59.46	Tori	0	9	9	7.25	74.50	81.75	0.000	0.151	0.151	0.00000	0.00203	0.00185	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
757	Haul	5	2	30	390	773	1.98	59.46	Tori	0	0	0	4.75	74.50	79.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
758	Haul	5	2	28	390	773	1.98	55.50	Tori	0	4	4	3.50	37.25	40.75	0.000	0.072	0.072	0.00000	0.00190	0.00177	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
759	Haul	5	2	30	390	773	1.98	59.46	Tori	0	6	6	9.75	74.50	84.25	0.000	0.101	0.101	0.00000	0.00135	0.00120	0	1	1	0.00000	0.01682	0.01682	0.00000	0.00023	0.000
760	Haul	5	2	30	390	773	1.98	59.46	Tori	0	4	4	2.50	74.50	77.00	0.000	0.067	0.067	0.00000	0.00090	0.00087	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
768	Haul	5	3	30	542	1174	2.17	64.98	Tori	0	37	37	4.75	100.00	104.75	0.000	0.569	0.569	0.00000	0.00569	0.00544	0	5	5	0.00000	0.07694	0.07694	0.00000	0.00077	0.000
779	Haul	5	3	13	542	1174	2.17	28.16	Tori	0	6	6	7.00	39.50	46.50	0.000	0.213	0.213	0.00000	0.00538	0.00458	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
828	Haul	5	7	30	592	1103	1.86	55.90	Tori	0	53	53	14.50	74.50	89.00	0.000	0.944	0.944	0.00000	0.01273	0.01065	0	6	6	0.00000	0.10734	0.10734	0.00000	0.00144	0.001
829	Haul	5	7	30	592	1103	1.86	55.90	Tori	0	23	23	14.50	74.50	89.00	0.000	0.411	0.411	0.00000	0.00552	0.00462	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
830	Haul	5	7	30	592	1103	1.86	55.90	Tori	0	8	8	9.50	39.50	49.00	0.000	0.143	0.143	0.00000	0.00362	0.00292	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
831	Haul	5	7	30	592	1103	1.86	55.90	Tori	1	22	23	9.50	57.00	66.50	0.018	0.394	0.411	0.00188	0.00691	0.00619	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
832	Haul	5	7	30	592	1103	1.86	55.90	Tori	0	3	3	7.00	74.50	81.50	0.000	0.054	0.054	0.00000	0.00072	0.00066	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
833	Haul	5	7	30	592	1103	1.86	55.90	Tori	0	1	1	7.00	74.50	81.50	0.000	0.018	0.018	0.00000	0.00024	0.00022	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
834	Haul	5	7	30	592	1103	1.86	55.90	Tori	0	3	3	7.00	57.00	64.00	0.000	0.054	0.054	0.00000	0.00094	0.00084	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
835	Haul	5	7	30	592	1103	1.86	55.90	Tori	0	2	2	15.75	80.88	96.63	0.000	0.036	0.036	0.00000	0.00044	0.00037	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
836	Haul	5	7	30	592	1103	1.86	55.90	Tori	0	4	4	14.50	80.88	95.38	0.000	0.072	0.072	0.00000	0.00088	0.00075	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
837	Haul	5	7	30	592	1103	1.86	55.90	Tori	2	1	3	2.50	57.00	59.50	0.036	0.018	0.054	0.01431	0.00031	0.00090	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
838	Haul	5	7	30	592	1103	1.86	55.90	Tori	0	1	1	4.75	74.50	79.25	0.000	0.018	0.018	0.00000	0.00024	0.00023	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
839	Haul	5	7	30	592	1103	1.86	55.90	Tori	0	4	4	4.75	74.50	79.25	0.000	0.072	0.072	0.00000	0.00096	0.00090	0	2	2	0.00000	0.03578	0.03578	0.00000	0.00048	0.000
893	Haul	5	12	27	465	1202	2.58	69.79	Tori	0	0	0	9.50	9.50	19.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
896	Haul	5	12	30	465	1202	2.58	77.55	Tori	0	0	0	1.25	13.50	14.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
897	Haul	5	12	30	465	1202	2.58	77.55	Tori	0	0	0	1.25	7.25	8.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
898	Haul	5	12	30	465	1202	2.58	77.55	Tori	0	0	0	2.50	12.00	14.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
899	Haul	5	12	30	465	1202	2.58	77.55	Tori	0	0	0	4.75	18.25	23.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
900	Haul	5	12	30	465	1202	2.58	77.55	Tori	0	0	0	7.25	15.75	23.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
901	Haul	5	12	30	465	1202	2.58	77.55	Tori	0	0	0	4.75	14.50	19.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
902	Haul	5	12	30	465	1202	2.58	77.55	Tori	0	0	0	2.50	14.50	17.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
903	Haul	5	12	30	465	1202	2.58	77.55	Tori	0	0	0	2.50	18.25	20.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
939	Haul	5	15	30	385	765	1.99	59.61	Tori	0	0	0	18.25	9.50	27.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
940	Haul	5	15	30	385	765	1.99	59.61	Tori	0	0	0	7.00	9.50	16.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
941	Haul	5	15	30	385	765	1.99	59.61	Tori	0	0	0	7.00	7.00	14.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
942	Haul	5	15	30	385	765	1.99	59.61	Tori	0	0	0	7.00	7.00	14.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
943	Haul	5	15	30	385	765	1.99	59.61	Tori	0	0	0	7.00	7.00	14.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
944	Haul	5	15	30	385	765	1.99	59.61	Tori	0	1	1	18.25	12.00	30.25	0.000	0.017	0.017	0.00000	0.00140	0.00055	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
945	Haul	5	15	30	385	765	1.99	59.61	Tori	0	0	0	13.50	13.50	27.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
946	Haul	5	15	30	385	765	1.99	59.61	Tori	0	0	0	13.50	13.50	27.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
947	Haul	5	15	30	385	765	1.99	59.61	Tori	0	0	0	7.00	9.50	16.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
958	Haul	5	17	30	440	1178	2.68	80.32	Tori	0	0	0	7.00	17.00	24.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
959	Haul	5	17	30	440	1178	2.68	80.32	Tori	0	0	0	12.00	20.75	32.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
960	Haul	5	17	30	440	1178	2.68	80.32	Tori	0	0	0	12.00	24.50	36.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
961	Haul	5	17	30	440	1178	2.68	80.32	Tori	0	0	0	14.50	20.75	35.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
962	Haul	5	17	30	440	1178	2.68	80.32	Tori	0	0	0	14.50	14.50	29.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
963	Haul	5	17	30	440	1178	2.68	80.32	Tori	0	0	0	12.00	14.50	26.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
964	Haul	5	17	30	440	1178	2.68	80.32	Tori	0	0	0	14.50	14.50	29.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
965	Haul	5	17	30	440	1178	2.68	80.32	Tori	0	0	0	17.00	14.50	31.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
966	Haul	5	17	30	440	1178	2.68	80.32	Tori	0	0	0	12.00	12.00	24.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
967	Haul	5	17	30	440	1178	2.68	80.32	Tori	0	0	0	12.00	12.00	24.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
968	Haul	5	17	30	440	1178	2.68	80.32	Tori	0	0	0	14.50	14.50	29.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
969	Haul	5	17	30	440	1178	2.68	80.32	Tori	0	0	0	20.75	14.50	35.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
SUMS				4114				7973.51		107	278	385	2317.75	2529.01	4846.76															

DESCRIPTION OF THE ANALYSIS:

Computer file name: FinHaul2

Purpose of this particular analysis: To determine if deterrents mitigate against all kinds of attempts (chases, landings and dives) on the haul

Rationale behind the analysis: Compare number of attempts per hook for the deterrents and the control on the haul of Trips 2, 3, 4 and 5 combined

Method of this particular analysis: assemble a table containing the total number of attempts and interactions per observation period and normalize these numbers for the number of birds present and calculate the number of behaviors per bird per hook

Key to Abbreviations used in this Data Table:

Dur = duration

Obs = observation period

Haul # = a 2one digit number in which the first digit is the haul # for that trip a number behind the decimal point is the observation number a given period was for that haul - "1.1" is the first observation period for the first haul of trip x.

Total Attempts = the total number of chases, landings and dives for all albatross species present during the observation period. Includes both "in BOZ" and "out BOZ" counts.

Total Interacts = the total number of contacts, entanglements and hookings for all albatross species present during the observation period. Includes both "in BOZ" and "out BOZ" counts.

NOTE: This is a list of all those notebook pages ("SiTripX") for which there were birds present.

SiTrip4" Notebk sheet#	Set or Haul	trip	haul	Obs Dur (min	Haul Dur (min	Total Hook #	Hooks per min	Hooks in obs per	Deter Type	BFA Attempts	LA Attempts	TOTAL Attempts	# BFA Present	# LA Present	TOTAL # Birds Present	BFA Attempts per Hook	LA Attempts per Hook	TOTAL Attempts per Hook	BFA Attempts per bird per hook	LA Attempts per bird per hook	TOTAL Attempts per bird per hook	BFA Interacts	LA Interacts	TOTAL Interacts	BFA Interacts per Hook	LA Interacts per Hook	TOTAL Interacts per Hook	BFA Interacts per bird per hook	LA Interacts per bird per hook	TOTAL Interacts per bird per hook
127	Haul	2	2	30	510	885	1.74	52.06	Buoy	0	0	0	12.50	0.00	12.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
128	Haul	2	2	30	510	885	1.74	52.06	Buoy	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
129	Haul	2	2	30	510	885	1.74	52.06	Buoy	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
130	Haul	2	2	32	510	885	1.74	55.53	Buoy	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
131	Haul	2	2	30	510	885	1.74	52.06	Buoy	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
132	Haul	2	2	30	510	885	1.74	52.06	Buoy	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
133	Haul	2	2	30	510	885	1.74	52.06	Buoy	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
134	Haul	2	2	30	510	885	1.74	52.06	Buoy	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
135	Haul	2	2	30	510	885	1.74	52.06	Buoy	0	0	0	12.50	0.00	12.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
136	Haul	2	2	30	510	885	1.74	52.06	Buoy	0	0	0	17.50	0.00	17.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
182	Haul	2	6	30	335	649	1.94	58.12	Buoy	11	0	11	12.50	0.00	12.50	0.189	0.000	0.189	0.01514		0.01514	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
183	Haul	2	6	30	335	649	1.94	58.12	Buoy	1	0	1	17.50	0.00	17.50	0.017	0.000	0.017	0.00098		0.00098	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
184	Haul	2	6	30	335	649	1.94	58.12	Buoy	1	0	1	25.00	0.00	25.00	0.017	0.000	0.017	0.00069		0.00069	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
185	Haul	2	6	27	335	649	1.94	52.31	Buoy	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
186	Haul	2	6	30	335	649	1.94	58.12	Buoy	4	0	4	12.50	0.00	12.50	0.069	0.000	0.069	0.00551		0.00551	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
187	Haul	2	6	36	335	649	1.94	69.74	Buoy	0	0	0	12.50	2.50	15.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
191	Haul	2	6	10	335	649	1.94	19.37	Buoy	0	0	0	12.50	2.50	15.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
226	Haul	2	10	30	402	903	2.25	67.38	Buoy	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
227	Haul	2	10	30	402	903	2.25	67.39	Buoy	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
230	Haul	2	10	25	402	903	2.25	56.16	Buoy	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
232	Haul	2	10	30	402	903	2.25	67.38	Buoy	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
233	Haul	2	10	30	402	903	2.25	67.38	Buoy	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
235	Haul	2	10	30	402	903	2.25	67.38	Buoy	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
276	Haul	2	14	30	249	535	2.15	64.46	Buoy	0	0	0	40.00	2.50	42.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
278	Haul	2	14	32	249	535	2.15	68.76	Buoy	5	0	5	40.00	0.00	40.00	0.073	0.000	0.073	0.00182		0.00182	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
279	Haul	2	14	30	249	535	2.15	64.46	Buoy	0	0	0	17.50	0.00	17.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
281	Haul	2	14	23	249	535	2.15	49.42	Buoy	0	0	0	40.00	0.00	40.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
313	Haul	2	17	15	525	1095	2.08	31.29	Buoy	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
347	Haul	3	2	30	325	413	1.27	38.12	Buoy	0	0	0	39.50	2.50	42.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
348	Haul	3	2	30	325	413	1.27	38.12	Buoy	1	0	1	39.50	1.00	40.50	0.026	0.000	0.026	0.00066	0.00000	0.00065	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
349	Haul	3	2	30	325	413	1.27	38.12	Buoy	0	0	0	57.00	2.50	59.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
350	Haul	3	2	22	325	413	1.27	27.96	Buoy	0	0	0	57.00	2.50	59.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
353	Haul	3	2	7	325	413	1.27	8.90	Buoy	0	0	0	74.50	2.50	77.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
396	Haul	3	6	30	541	701	1.30	38.87	Buoy	0	0	0	24.50	7.00	31.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
397	Haul	3	6	31	541	701	1.30	40.17	Buoy	3	0	3	32.00	0.00	32.00	0.075	0.000	0.075	0.00233		0.00233	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
398	Haul	3	6	30	541	701	1.30	38.87	Buoy	0	0	0	39.50	7.00	46.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
400	Haul	3	6	23	541	701	1.30	29.80	Buoy	0	0	0	32.00	4.75	36.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
401	Haul	3	6	30	541	701	1.30	38.87	Buoy	0	0	0	39.50	2.50	42.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
402	Haul	3	6	30	541	701	1.30	38.87	Buoy	0	0	0	39.50	4.75	44.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
403	Haul	3	6	33	541	701	1.30	42.76	Buoy	0	0	0	39.50	7.00	46.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
404	Haul	3	6	36	541	701	1.30	46.65	Buoy	0	0	0	39.50	2.50	42.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
422	Haul	3	8	30	467	660	1.41	42.40	Buoy	0	0	0	32.00	2.50	34.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
423	Haul	3	8	30	467	660	1.41	42.40	Buoy	0	0	0	24.50	0.00	24.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
424	Haul	3	8	32	467	660	1.41	45.22	Buoy	0	0	0	39.50	2.50	42.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
426	Haul	3	8	30	467	660	1.41	42.40	Buoy	0	0	0	20.75	2.50	23.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
427	Haul	3	8	30	467	660	1.41	42.40	Buoy	0	0	0	14.50	2.50	17.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
428	Haul	3	8	12	467	660	1.41	16.96	Buoy	0	0	0	24.50	2.50	27.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
430	Haul	3	8	30	467	660	1.41	42.40	Buoy	0	0	0	57.00	4.75	61.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
431	Haul	3	8	30	467	660	1.41	42.40	Buoy	0	0	0	32.00	2.50	34.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
471	Haul	3	12	61	465	696	1.50	91.30	Buoy	0	0	0	20.75	2.50	23.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
472	Haul	3	12	30	465	696	1.50	44.90	Buoy	0	0	0	17.00	2.50	19.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
474	Haul	3	12	30	465	696	1.50	44.90	Buoy	0	0	0	4.75	0.00	4.75	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
475	Haul	3	12	35	465	696	1.50	52.39	Buoy	0	0	0	7.00	0.00	7.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
476	Haul	3	12	30	465	696	1.50	44.90	Buoy	0	0	0	7.25	0.00	7.25	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
478	Haul	3	12	30	465	696	1.50	44.90	Buoy	0	0	0	8.50	0.00	8.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
480	Haul	3	12	27	465	696	1.50	40.41	Buoy	10	0	10	4.75	0.00	4.75	0.247	0.000	0.247	0.05209		0.05209	1	0	1	0.02474	0.00000	0.02474	0.00521		0.00521
513	Haul	3	16	30	247	298	1.21	36.19	Buoy	0	0	0	12.00	4.75	16.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
514	Haul	3	16	30	247	298	1.21	36.19	Buoy	0	0	0	18.25	2.50	20.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
515	Haul	3	16	30	247	298	1.21	36.19	Buoy	0	0	0	12.00	4.75	16.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
516	Haul	3	16	30	247	298	1.21	36.19	Buoy	0	0	0	14.50	7.00	21.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
517	Haul	3	16	36	247	298	1.21	43.43	Buoy	0	0	0	20.75	7.00	27.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
547	Haul	3	20	30	363	450	1.24	37.19	Buoy	0	0	0	12.00	24.50	36.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
548	Haul	3	20	30	363	450	1.24	37.19	Buoy	0	0	0	12.00	28.25	40.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
549	Haul	3	20	30	363	450	1.24	37.19	Buoy	0	0	0	14.50	28.25	42.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
551	Haul	3	20	34	363	450	1.24	42.15	Buoy	0	0	0	12.00	20.75	32.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	2	2	0.00000	0.04745	0.04745	0.00000	0.00229	0.00145
552	Haul	3	20	30	363	450	1.24	37.19	Buoy	0	0	0	2.50	24.50	27.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
553	Haul	3	20	19	363	450	1.24	23.55	Buoy	0	0	0	7.25	32.00	39.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
800	Haul	4	3	30	581	834	1.61	48.23	Buoy	0	2	2	24.50	17.00	41.50	0.000	0.041	0.041	0.00000	0.00244	0.00100	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
801	Haul	4	3	5	581	834	1.61	8.04	Buoy	0	8	8	20.75	14.50	35.25	0.000	0.995	0.995	0.00000	0.06864	0.02824	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
803	Haul	4	3	40	581	834	1.61	64.30	Buoy	0	3	3	9.50	9.50	19.00	0.000	0.047	0.047	0.00000	0.00491	0.00246	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
804	Haul	4	3	30	581	834	1.61	48.23	Buoy	0	3	3	12.00	9.50	21.50	0.000	0.062	0.062	0.00000	0.00656	0.00289	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
805	Haul	4	3	30	581	834	1.61	48.23	Buoy	0	4	4	20.75	14.50	35.25	0.000	0.083	0.083	0.00000	0.00572	0.00235	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
807	Haul	4	3	7	581	834	1.61	11.25	Buoy	2	0	2	17.00	17.00	34.00	0.178	0.000	0.178	0.01045	0.00000	0.00523	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
808	Haul	4	3	30	581	834	1.61	48.23	Buoy	0	0	0	18.25	12.00	30.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
809	Haul	4	3	30	581	834	1.61	48.23	Buoy	0	0	0	39.50	18.25	57.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
810	Haul	4	3	30	581	834	1.61	48.23	Buoy	0	0	0	32.00	24.50	56.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
811	Haul	4	3	30	581	834	1.61	48.23	Buoy	0	0	0	32.00	20.75	52.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
675	Haul	4	8	30	417	900	2.16	64.75	Buoy	0	0	0	12.00	20.75	32.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
676	Haul	4	8	30	417	900	2.16	64.75	Buoy	0	0	0	9.50	17.00	26.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
677	Haul	4	8	30	417	900	2.16	64.75	Buoy	1	1	2	12.00	20.75	32.75	0.015	0.015	0.031	0.00129	0.00074	0.00094	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
685	Haul	4	9	30	511	900	1.76	52.84	Buoy	0	2	2	24.50	12.00	36.50	0.000	0.038	0.038	0.00000	0.00315	0.00104	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
686	Haul	4	9	30	511	900	1.76	52.84	Buoy	0	0	0	28.25	7.00	35.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
687	Haul	4	9	30	511	900	1.76	52.84	Buoy	0	0	0	17.00	7.00	24.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
688	Haul	4	9	30	511	900	1.76	52.84	Buoy	0	0	0	17.00	12.00	29.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
690	Haul	4	9	30	511	900	1.76	52.84	Buoy	0	0	0	32.00	24.50	56.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
691	Haul	4	9	30	511	900	1.76	52.84	Buoy	0	0	0	20.75	20.75	41.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
692	Haul	4	9	30	511	900	1.76	52.84	Buoy	0	0	0	28.25	17.00	45.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
693	Haul	4	9	30	511	900	1.76	52.84	Buoy	0	0	0	39.50	14.50	54.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
694	Haul	4	9	30	511	900	1.76	52.84	Buoy	0	0	0	24.50	9.50	34.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
720	Haul	4	12	30	434	906	2.09	62.63	Buoy	0	9	9	17.00	17.00	34.00	0.000	0.144	0.144	0.00000	0.00845	0.00423	0	1	1	0.00000	0.01597	0.01597	0.00000	0.00094	0.00047
721	Haul	4	12	30	434	906	2.09	62.63	Buoy	0	6	6	24.50	24.50	49.00	0.000	0.096	0.096	0.00000	0.00391	0.00196	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
722	Haul	4	12	30	434	906	2.09	62.63	Buoy	1	6	7	49.50	24.50	74.00	0.016	0.096	0.112	0.00032	0.00391	0.00151	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
723	Haul	4	12	30	434	906	2.09	62.63	Buoy	0	0	0	39.50	32.00	71.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
724	Haul	4	12	30	434	906	2.09	62.63	Buoy	0	0	0	39.50	39.50	79.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
725	Haul	4	12	30	434	906	2.09	62.63	Buoy	0	10	10	57.00	0.00	57.00	0.000	0.160	0.160	0.00000		0.00280	0	1	1	0.00000	0.01597	0.01597	0.00000		0.00028
726	Haul	4	12	30	434	906	2.09	62.63	Buoy	0	11	11	57.00	0.00	57.00	0.000	0.176	0.176	0.00000		0.00308	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
766	Haul	5	3	30	542	1174	2.17	64.98	Buoy	4	30	34	9.50	87.75	96.75	0.062	0.462	0.523	0.00648	0.00529	0.00541	0	6	6	0.00000	0.09233	0.09233	0.00000	0.00106	0.0009
767	Haul	5	3	30	542	1174	2.17	64.98	Buoy	4	64	68	9.50	100.00	109.50	0.062	0.985	1.046	0.00648	0.00985	0.00956	1	14	15	0.01539	0.21545	0.23083	0.00162	0.00215	0.0021
771	Haul	5	3	30	542	1174	2.17	64.98	Buoy	0	8	8	9.50	87.75	96.75	0.000	0.123	0.123	0.00000	0.00141	0.00127	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
772	Haul	5	3	30	542	1174	2.17	64.98	Buoy	10	56	66	20.75	100.00	120.75	0.154	0.862	1.016	0.00742	0.00862	0.00841	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
773	Haul	5	3	30	542	1174	2.17	64.98	Buoy	2	77	79	12.00	87.25	99.25	0.031	1.185	1.216	0.00256	0.01358	0.01275	0	3	3	0.00000	0.04617	0.04617	0.00000	0.00053	0.0004
774	Haul	5	3	30	542	1174	2.17	64.98	Buoy	0	89	89	9.50	74.50	84.00	0.000	1.370	1.370	0.00000	0.01838	0.01630	0	16	16	0.00000	0.24622	0.24622	0.00000	0.00331	0.0029
776	Haul	5	3	13	542	1174	2.17	28.16	Buoy	0	3	3	17.00	74.50	91.50	0.000	0.107	0.107	0.00000	0.00143	0.00116	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
777	Haul	5	3	30	542	1174	2.17	64.98	Buoy	0	11	11	15.75	87.25	103.00	0.000	0.169	0.169	0.00000	0.00194	0.00164	0	1	1	0.00000	0.01539	0.01539	0.00000	0.00018	0.0001
778	Haul	5	3	30	542	1174	2.17	64.98	Buoy	0	105	105	7.00	74.50	81.50	0.000	1.616	1.616	0.00000	0.02169	0.01983	0	8	8	0.00000	0.12311	0.12311	0.00000	0.00165	0.0015
786	Haul	5	4	45	510	917	1.80	80.91	Buoy	0	17	17	1.25	57.00	58.25	0.000	0.210	0.210	0.00000	0.00369	0.00361	0	1	1	0.00000	0.01236	0.01236	0.00000	0.00022	0.0002
787	Haul	5	4	40	510	917	1.80	71.92	Buoy	0	8	8	4.75	57.00	61.75	0.000	0.111	0.111	0.00000	0.00195	0.00180	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
788	Haul	5	4	30	510	917	1.80	53.94	Buoy	0	5	5	2.50	39.50	42.00	0.000	0.093	0.093	0.00000	0.00235	0.00221	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
789	Haul	5	4	2	510	917	1.80	3.60	Buoy	0	2	2	2.50	39.50	42.00	0.000	0.556	0.556	0.00000	0.01408	0.01324	0	1	1	0.00000	0.27808	0.27808	0.00000	0.00704	0.0066
861	Haul	5	10	30	442	1094	2.48	74.75	Buoy	0	2	2	2.50	7.25	9.75	0.000	0.027	0.027	0.00000	0.00372	0.00276	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
862	Haul	5	10	30	442	1094	2.48	74.75	Buoy	0	0	0	2.50	9.50	12.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
863	Haul	5	10	30	442	1094	2.48	74.75	Buoy	0	1	1	2.50	12.00	14.50	0.000	0.013	0.013	0.00000	0.00112	0.00093	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
864	Haul	5	10	30	442	1094	2.48	74.75	Buoy	0	0	0	2.50	12.00	14.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
865	Haul	5	10	30	442	1094	2.48	74.75	Buoy	0	9	9	4.75	20.75	25.50	0.000	0.121	0.121	0.00000	0.00584	0.00475	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
866	Haul	5	10	30	442	1094	2.48	74.75	Buoy	0	0	0	7.00	20.75	27.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
867	Haul	5	10	30	442	1094	2.48	74.75	Buoy	2	0	2	7.00	32.00	39.00	0.027	0.000	0.027	0.00385	0.00000	0.00069	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
868	Haul	5	10	30	442	1094	2.48	74.75	Buoy	0	0	0	4.75	23.25	28.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
928	Haul	5	14	30	490	1086	2.27	66.49	Buoy	0	2	2	18.75	57.00	75.75	0.000	0.030	0.030	0.00000	0.00053	0.00040	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
929	Haul	5	14	30	490	1086	2.27	66.49	Buoy	5	5	10	20.75	57.00	77.75	0.075	0.075	0.150	0.00362	0.00132	0.00193	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
930	Haul	5	14	30	490	1086	2.27	66.49	Buoy	1	4	5	17.00	32.00	49.00	0.015	0.060	0.075	0.00088	0.00188	0.00153	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
931	Haul	5	14	30	490	1086	2.27	66.49	Buoy	0	0	0	24.50	20.75	45.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
932	Haul	5	14	30	490	1086	2.27	66.49	Buoy	0	0	0	20.75	32.00	52.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
933	Haul	5	14	30	490	1086	2.27	66.49	Buoy	0	0	0	20.75	39.50	60.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
934	Haul	5	14	30	490	1086	2.27	66.49	Buoy	0	0	0	14.50	32.00	46.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
935	Haul	5	14	30	490	1086	2.27	66.49	Buoy	4	10	14	17.00	32.00	49.00	0.060	0.150	0.211	0.00354	0.00470	0.00430	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
936	Haul	5	14	30	490	1086	2.27	66.49	Buoy	0	0	0	12.00	20.75	32.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000

955	Haul	5	16	30	298	889	2.98	89.50	Busy	0	0	0	15.75	17.00	32.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SUMS				3730				6777.65		72	573	645	2468.25	2198.25	4666.50							7	54	56						
MEANS				29				57.85		0.5625	4.47856	5.03906	19.28	17.17	36.46	0.010999	0.080796	0.091794	0.000985	0.007466	0.00196	0.01563	0.47188	0.4375	0.00031	0.00866	0.00897	0.00005	0.00021	0.00017
104	Haul	2	1	30	603	880	1.41	42.42	Control	0	0	0	4.00	0.00	4.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
105	Haul	2	1	30	603	880	1.41	42.42	Control	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
106	Haul	2	1	30	603	880	1.41	42.42	Control	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
108	Haul	2	1	30	603	880	1.41	42.42	Control	1	0	1	2.50	0.00	2.50	0.024	0.000	0.024	0.00943		0.00943	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
109	Haul	2	1	30	603	880	1.41	42.42	Control	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
110	Haul	2	1	30	603	880	1.41	42.42	Control	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
111	Haul	2	1	30	603	880	1.41	42.42	Control	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
112	Haul	2	1	30	603	880	1.41	42.42	Control	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
113	Haul	2	1	33	603	880	1.41	46.67	Control	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
114	Haul	2	1	30	603	880	1.41	42.42	Control	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
115	Haul	2	1	30	603	880	1.41	42.42	Control	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
116	Haul	2	1	30	603	880	1.41	42.42	Control	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
117	Haul	2	1	30	603	880	1.41	42.42	Control	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
118	Haul	2	1	30	603	880	1.41	42.42	Control	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
119	Haul	2	1	30	603	880	1.41	42.42	Control	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
124	Haul	2	2	26	510	885	1.74	45.10	Control	2	0	2	7.50	0.00	7.50	0.041	0.000	0.041	0.00549		0.00549	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
125	Haul	2	2	30	510	885	1.74	52.06	Control	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
126	Haul	2	2	30	510	885	1.74	52.06	Control	14	0	14	12.50	0.00	12.50	0.269	0.000	0.269	0.02151		0.02151	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
140	Haul	2	3	30	367	842	2.29	68.83	Control	3	0	3	2.50	0.00	2.50	0.044	0.000	0.044	0.01743		0.01743	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
141	Haul	2	3	30	367	842	2.29	68.83	Control	16	0	16	12.50	0.00	12.50	0.232	0.000	0.232	0.01860		0.01860	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
142	Haul	2	3	16	367	842	2.29	36.71	Control	1	3	4	12.50	2.50	15.00	0.027	0.082	0.109	0.00718	0.03280	0.00726	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
156	Haul	2	4	30	440	879	2.00	59.93	Control	10	0	10	2.50	0.00	2.50	0.167	0.000	0.167	0.06674		0.06674	1	0	1	0.01669	0.00000	0.01669	0.00067		0.00067
157	Haul	2	4	15	440	879	2.00	29.97	Control	0	0	0	12.50	2.50	15.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
158	Haul	2	4	30	440	879	2.00	59.93	Control	7	0	7	7.50	2.50	10.00	0.117	0.000	0.117	0.01557	0.00000	0.01168	2	0	2	0.03337	0.00000	0.03337	0.00445	0.00000	0.00334
171	Haul	2	5	9	405	891	2.20	19.80	Control	3	0	3	25.00	0.00	25.00	0.152	0.000	0.152	0.00606		0.00606	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
176	Haul	2	5	17	405	891	2.20	37.40	Control	80	0	80	12.50	0.00	12.50	1.804	0.000	1.804	0.17834		0.17834	18	0	18	0.48128	0.00000	0.48128	0.03850		0.03850
177	Haul	2	5	30	405	891	2.20	66.00	Control	7	0	7	12.50	2.50	15.00	0.106	0.000	0.106	0.00848	0.00000	0.00707	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
178	Haul	2	5	30	405	891	2.20	66.00	Control	10	0	10	7.50	2.50	10.00	0.152	0.000	0.152	0.02020	0.00000	0.01515	2	0	2	0.03030	0.00000	0.03030	0.00404	0.00000	0.00303
179	Haul	2	5	30	405	891	2.20	66.00	Control	11	0	11	25.00	2.50	27.50	0.167	0.000	0.167	0.00667	0.00000	0.00606	1	0	1	0.01515	0.00000	0.01515	0.00061	0.00000	0.00055
188	Haul	2	6	35	335	649	1.94	67.81	Control	7	0	7	7.50	0.00	7.50	0.103	0.000	0.103	0.01376		0.01376	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
189	Haul	2	6	30	335	649	1.94	58.12	Control	0	0	0	12.50	2.50	15.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
190	Haul	2	6	30	335	649	1.94	58.12	Control	2	0	2	2.50	2.50	5.00	0.034	0.000	0.034	0.01376	0.00000	0.00688	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
197	Haul	2	7	30	421	823	1.95	58.65	Control	23	0	23	12.50	0.00	12.50	0.392	0.000	0.392	0.03137		0.03137	1	0	1	0.01705	0.00000	0.01705	0.00136		0.00136
198	Haul	2	7	30	421	823	1.95	58.65	Control	26	0	26	12.50	0.00	12.50	0.443	0.000	0.443	0.03547		0.03547	8	0	8	0.13641	0.00000	0.13641	0.01091		0.01091
199	Haul	2	7	30	421	823	1.95	58.65	Control	3	0	3	17.50	2.50	20.00	0.051	0.000	0.051	0.00292	0.00000	0.00256	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
210	Haul	2	8	33	356	906	2.54	83.96	Control	12	0	12	40.00	0.00	40.00	0.143	0.000	0.143	0.00357		0.00357	1	0	1	0.01191	0.00000	0.01191	0.00030		0.00030
211	Haul	2	8	30	356	906	2.54	76.35	Control	13	0	13	17.50	0.00	17.50	0.170	0.000	0.170	0.00973		0.00973	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
212	Haul	2	8	11	356	906	2.54	27.99	Control	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
213	Haul	2	8	30	356	906	2.54	76.35	Control	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
220	Haul	2	9	30	392	884	2.26	67.95	Control	13	0	13	25.00	0.00	25.00	0.191	0.000	0.191	0.00765		0.00765	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
221	Haul	2	9	30	392	884	2.26	67.95	Control	4	0	4	17.50	0.00	17.50	0.059	0.000	0.059	0.00336		0.00336	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
228	Haul	2	10	33	402	903	2.25	74.13	Control	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
229	Haul	2	10	30	402	903	2.25	67.39	Control	2	0	2	7.50	0.00	7.50	0.030	0.000	0.030	0.00396		0.00396	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
236	Haul	2	10	22	402	903	2.25	49.42	Control	6	0	6	2.50	0.00	2.50	0.121	0.000	0.121	0.04857		0.04857	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
242	Haul	2	11	30	422	832	2.21	66.26	Control	43	0	43	17.50	0.00	17.50	0.649	0.000	0.649	0.03709		0.03709	1	0	1	0.01509	0.00000	0.01509	0.00086		0.00086
243	Haul	2	11	31	422	832	2.21	68.46	Control	1	0	1	25.00	0.00	25.00	0.015	0.000	0.015	0.00058		0.00058	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
244	Haul	2	11	30	422	832	2.21	66.28	Control	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
250	Haul	2	12	17	381	826	2.37	40.26	Control	0	0	0	12.50	0.00	12.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
253	Haul	2	12	30	381	826	2.37	71.05	Control	3	0	3	12.50	0.00	12.50	0.042	0.000	0.042	0.00338		0.00338	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
254	Haul	2	12	5	381	826	2.37	11.84	Control	1	0	1	40.00	0.00	40.00	0.084	0.000	0.084	0.00211		0.00211	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
257	Haul	2	12	30	381	826	2.37	71.05	Control	15	0	15	40.00	2.50	42.50	0.211	0.000	0.211	0.00528	0.00000	0.00497	2	0	2	0.02815	0.00000	0.02815	0.00070	0.00000	0.00066
258	Haul	2	12	13	381	826	2.37	30.79	Control	2	0	2	25.00	0.00	25.00	0.065	0.000	0.065	0.00260		0.00260	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
260	Haul	2	12	31	381	826	2.37	73.42	Control	4	0	4	40.00	0.00	40.00	0.054	0.000	0.054	0.00136		0.00136	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
262	Haul	2	12	31	381	826	2.37	73.42	Control	35	0	35	12.50	0.00	12.50	0.477	0.000	0.477	0.03814		0.03814	3	0	3	0.04086	0.00000	0.04086	0.00327		0.00327
263	Haul	2	12	30	381	826	2.37	71.05	Control	33	0	33	75.00	0.00	75.00	0.464	0.000	0.464	0.00619		0.00619	1	0	1	0.01407	0.00000	0.01407	0.00019		0.00019
266	Haul	2	13	30	401	914	2.28	68.38	Control	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
267	Haul	2	13	30	401	914	2.28	68.38	Control	57	0	57	12.50	0.00	12.50	0.834	0.000	0.834	0.06669		0.06669	2	0	2	0.02925	0.00000	0.02925	0.00234		0.00234
272	Haul	2	13	30	401	914	2.28	68.38	Control	8	0	8	7.50	0.00	7.50	0.117	0.000	0.117	0.01560		0.01560	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
275	Haul	2	14	30	249	535	2.15	64.46	Control	127	0	127	17.50	0.00	17.50	1.970	0.000	1.970	0.11259		0.11259	22	0	22	0.34131	0.00000	0.34131	0.01950		0.01950
277	Haul	2	14	31	249	535	2.15	66.61	Control	115	0	115	40.00	2.50	42.50	1.727	0.000	1.727	0.04316	0.00000	0.04062	17	0	12	0.18016	0.00000	0.18016	0.00450	0.00000	0.00424
280	Haul	2	14	30	249	535	2.15	64.46	Control	35	0	35	40.00	0.00	40.00	0.543	0.000	0.543	0.01357		0.01357	1	0	1	0.01551	0.00000	0.01551	0.00039		0.00039
283	Haul	2	15	30	420	895	2.13	63.93	Control	37	0	37	25.00	0.00	25.00	0.579	0.000	0.579	0.02315		0.02315	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
284	Haul	2	15	33	420	895	2.13	70.32	Control	71	0	71	40.00	0.00	40.00	1.010	0.000	1.010	0.02524		0.02524	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
285	Haul	2	15	30	420	895	2.13	63.93	Control	59	0	59	40.00	0.00	40.00	0.923	0.000	0.923	0.02307		0.02307	1	0	1	0.01564	0.00000	0.01564	0.00039		0.00039
292	Haul	2	15	30	420	895	2.13	63.93	Control	26	2	28	12.50	2.50	15.00	0.407	0.031	0.438	0.03254	0.01251	0.02920	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
298	Haul	2	16	37	402	890	2.24	82.74	Control	0	0	0	40.00	0.00	40.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
299	Haul	2	16	30	402	890	2.24	67.08	Control	8	0	8	2.50	0.00	2.50	0.119	0.000	0.119	0.04770		0.04770	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
300	Haul	2	16	30	402	890	2.24	67.08	Control	5	0	5	25.00	0.00	25.00	0.075	0.000	0.075	0.00298		0.00298	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
336	Haul	3	1	32	425	621	1.46	46.76	Control	0	0	1	12.00	0.00	12.00	0.000	0.000	0.071	0.00000		0.00178	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
340	Haul	3	1	30	425	621	1.46	43.84	Control	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
346	Haul	3	2	30	325	413	1.27	38.12	Control	10	1	11	20.75	2.50	23.25	0.282	0.026	0.289	0.01284	0.01049	0.01241	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
351	Haul	3	2	30	325	413	1.27	38.12	Control	49	0	49	49.50	2.50	52.00	1.785	0.000	1.785	0.02507	0.00000	0.02472	14	0	14	0.36723	0.00000	0.36723	0.00742	0.00000	0.00706
352	Haul	3	2	30	325	413	1.27	38.12	Control	14	0	14	39.50	0.00	39.50	0.367	0.000	0.367	0.00930		0.00930	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
356	Haul	3	3	37	425	658	1.55	49.82	Control	0	0	0	7.00	0.00	7.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
357	Haul	3	3	30	425	658	1.55	46.52	Control	0	0	0	12.00	2.50	14.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
358	Haul	3	3	30	425	658	1.55	46.52	Control	0	0	0	18.75	2.50	20.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
362	Haul	3	3	30	425	658	1.55	46.52	Control	0	0	0	39.50	2.50	42.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
363	Haul	3	3	30	425	658	1.55	46.52	Control	0	0	0	24.50	2.50	27.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
364	Haul	3	3	30	425	658	1.55	46.52	Control	0	0	0	18.25	2.50	20.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
365	Haul	3	3	5	425	658	1.55	7.75	Control	0	0	0	14.50	4.75	19.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
372	Haul	3	4	30	464	605	1.30	39.17	Control	9	0	9	74.50	0.00	74.50	0.230	0.000	0.230	0.00309		0.00309	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
377	Haul	3	4	35	464	605	1.30	45.84	Control	1	0	1	24.50	2.50	27.00	0.022	0.000	0.022	0.00089	0.00000	0.00081	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
378	Haul	3	4	17	464	605	1.30	22.17	Control	3	0	3	24.50	2.50	27.00	0.135	0.000	0.135	0.00552	0.00000	0.00501	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
380	Haul	3	5	30	515	673	1.31	39.20	Control	1	0	1	30.50	0.00	30.50	0.026	0.000	0.026	0.00085		0.00085	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
383	Haul	3	5	30	515	673	1.31	39.20	Control	0	0	0	18.25	0.00	18.25	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
385	Haul	3	6	31	541	701	1.30	40.17	Control	0	0	0	24.50	4.75	29.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
398	Haul	3	6	30	541	701	1.30	38.87	Control	0	0	0	32.00	4.75	36.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
405	Haul	3	6	30	541	701	1.30	38.87	Control	3	1	4	74.50	4.75	79.25	0.077	0.026	0.103	0.00104	0.00547	0.00130	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
406	Haul	3	6	10	541	701	1.30	12.96	Control	0	0	0	74.50	7.00	81.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
407	Haul	3	6	30	541	701	1.30	38.87	Control	0	0	0	74.50	4.75	79.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
413	Haul	3	7	32	478	770	1.61	51.55	Control	26	0	26	57.00	4.75	61.75	0.504	0.000	0.504	0.00885	0.00000	0.00817	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
417	Haul	3	7	30	478	770	1.61	48.33	Control	0	0	0	40.75	2.50	43.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
418	Haul	3	7	31	478	770	1.61	49.94	Control	0	0	0	39.50	2.50	42.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
421	Haul	3	8	8	467	660	1.41	11.31	Control	8	0	8	39.50	2.50	42.00	0.708	0.000	0.708	0.01791	0.00000	0.01685	1	0	1	0.00845	0.00000	0.00845	0.00224	0.00000	0.00211
425	Haul	3	8	30	467	660	1.41	42.40	Control	0	0	0	32.00	4.75	36.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
429	Haul	3	8	32	467	660	1.41	45.22	Control	0	0	0	32.00	2.50	34.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
432	Haul	3	8	8	467	660	1.41	11.31	Control	0	0	0	14.50	0.00	14.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
437	Haul	3	9	30	503	718	1.43	42.82	Control	1	0	1	17.00	2.50	19.50	0.023	0.000	0.023	0.00137	0.00000	0.00120	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
438	Haul	3	9	27	503	718	1.43	38.54	Control	1	0	1	14.50	2.50	17.00	0.026	0.000	0.026	0.00179	0.00000	0.00153	0	1	1	0.00000	0.07585	0.07585	0.00000	0.01034	0.00153
441	Haul	3	9	28	503	718	1.43	39.97	Control	0	0	0	14.50	2.50	17.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
442	Haul	3	9	30	503	718	1.43	42.82	Control	0	1	1	17.00	2.50	19.50	0.000	0.023	0.023	0.00000	0.00904	0.00120	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
445	Haul	3	9	30	503	718	1.43	42.82	Control	0	0	0	25.75	2.50	28.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
446	Haul	3	9	14	503	718	1.43	19.98	Control	0	0	0	12.00	0.00	12.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
447	Haul	3	9	8	503	718	1.43	11.42	Control	0	0	0	20.75	2.50	23.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
450	Haul	3	10	31	568	780	1.36	42.22	Control	7	0	7	57.00	7.00	64.00	0.166	0.000	0.166	0.00291	0.00000	0.00259	4	0	4	0.09474	0.00000	0.09474	0.00166	0.00000	0.00148
456	Haul	3	10	31	568	780	1.36	42.22	Control	0	0	0	12.00	2.50	14.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	1	0	1	0.07368	0.00000	0.07368	0.00197	0.00000	0.00163
458	Haul	3	10	30	568	780	1.36	40.86	Control	0	0	0	32.00	2.50	34.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
460	Haul	3	10	14	568	780	1.36	19.07	Control	0	0	0	12.00	0.00	12.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
464	Haul	3	11	30	437	715	1.64	49.08	Control	0	0	0	28.25	2.50	30.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
467	Haul	3	11	26	437	715	1.64	42.54	Control	0	0	0	32.00	2.50	34.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
470	Haul	3	11	7	437	715	1.64	11.45	Control	0	0	0	7.00	0.00	7.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
473	Haul	3	12	30	485	808	1.50	44.90	Control	0	0	0	12.00	0.00	12.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
477	Haul	3	12	30	485	808	1.50	44.90	Control	0	0	0	7.25	0.00	7.25	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
479	Haul	3	12	47	485	808	1.50	67.86	Control	0	0	0	9.50	0.00	9.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
481	Haul	3	13	17	254	429	1.69	28.71	Control	0	0	0	15.75	0.00	15.75	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
484	Haul	3	13	32	254	429	1.69	54.05	Control	0	2	2	17.00	2.50	19.50	0.000	0.037	0.037	0.00000	0.01480	0.00190	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
485	Haul	3	13	10	254	429	1.69	16.89	Control	0	0	0	14.50	2.50	17.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
488	Haul	3	13	27	254	429	1.69	45.60	Control	1	0	1	12.00	2.50	14.50	0.022	0.000	0.022	0.00183	0.00000	0.00151	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
491	Haul	3	14	30	370	523	1.41	42.41	Control	0	0	0	4.75	0.00	4.75	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
497	Haul	3	14	26	370	523	1.41	36.75	Control	0	0	0	13.50	2.50	16.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
504	Haul	3	15	33	377	533	1.41	46.66	Control	17	0	17	12.00	0.00	12.00	0.757	0.000	0.757	0.07143		0.07143	1	0	1	0.07143	0.00000	0.07143	0.00179		0.00179
505	Haul	3	15	30	377	533	1.41	42.41	Control	0	0	0	12.00	0.00	12.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
511	Haul	3	16	4	247	298	1.21	4.83	Control	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
512	Haul	3	16	30	247	298	1.21	36.19	Control	7	0	7	7.25	2.50	9.75	0.055	0.000	0.055	0.00767	0.00000	0.00567	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
518	Haul	3	16	19	247	298	1.21	22.97	Control	0	0	0	12.00	0.00	12.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
520	Haul	3	17	32	192	245	1.28	40.83	Control	5	0	5	12.00	0.00	12.00	0.122	0.000	0.122	0.01020		0.01020	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
521	Haul	3	17	30	192	245	1.28	38.28	Control	2	0	2	14.50	2.50	17.00	0.052	0.000	0.052	0.00360	0.00000	0.00307	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
522	Haul	3	17	6	192	245	1.28	7.66	Control	0	0	0	12.00	2.50	14.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
525	Haul	3	17	10	192	245	1.28	12.76	Control	0	0	0	20.75	4.75	25.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
526	Haul	3	17	20	192	245	1.28	25.52	Control	1	2	3	20.75	7.00	27.75	0.039	0.078	0.118	0.00189	0.01120	0.00424	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
531	Haul	3	18	3	109	145	1.33	3.99	Control	0	0	0	39.50	24.50	64.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
535	Haul	3	19	10	301	378	1.26	12.56	Control	0	0	0	9.50	7.00	16.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
538	Haul	3	19	31	301	378	1.26	38.93	Control	0	6	6	12.00	12.00	24.00	0.000	0.154	0.154	0.00000	0.01286	0.00642	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
539	Haul	3	19	17	301	378	1.26	21.35	Control	3	1	4	9.50	7.00	16.50	0.141	0.047	0.187	0.01479	0.00668	0.01136	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
545	Haul	3	20	6	363	450	1.24	7.44	Control	0	0	0	17.00	17.00	34.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
546	Haul	3	20	30	363	450	1.24	37.19	Control	3	28	31	12.00	20.75	32.75	0.061	0.753	0.834	0.00672	0.03630	0.02545	0	6	6	0.00000	0.16133	0.16133	0.00000	0.00778	0.00493
550	Haul	3	20	33	363	450	1.24	40.91	Control	1	2	3	12.00	17.00	29.00	0.024	0.049	0.073	0.00204	0.00288	0.00253	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
556	Haul	3	21	30	402	569	1.42	42.46	Control	2	0	2	24.50	7.00	31.50	0.047	0.000	0.047	0.00192	0.00000	0.00150	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
561	Haul	3	21	30	402	569	1.42	42.46	Control	5	12	17	18.25	18.75	36.50	0.118	0.283	0.400	0.00645	0.01508	0.01097	0	1	1	0.00000	0.02355	0.02355	0.00000	0.00129	0.00065
570	Haul	4	1	30	475	928	1.95	58.61	Control	0	0	0	12.00	4.75	16.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
574	Haul	4	1	30	475	928	1.95	58.61	Control	2	0	2	9.50	2.50	12.00	0.034	0.000	0.034	0.00359	0.00000	0.00284	1	0	1	0.01706	0.00000	0.01706	0.00180	0.00000	0.00142
577	Haul	4	1	30	475	928	1.95	58.61	Control	0	0	0	7.00	7.00	14.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
584	Haul	4	2	30	484	974	2.01	60.37	Control	8	17	25	28.25	12.00	40.25	0.133	0.282	0.414	0.00469	0.02347	0.01029	0	1	1	0.00000	0.01656	0.01656	0.00000	0.00134	0.00047
585	Haul	4	2	6	484	974	2.01	12.07	Control	7	6	13	39.50	17.00	56.50	0.580	0.497	1.077	0.01468	0.02925	0.01906	1	0	1	0.08287	0.00000	0.08287	0.00210	0.00000	0.00147
588	Haul	4	2	30	484	974	2.01	60.37	Control	24	16	40	18.25	12.00	30.25	0.398	0.265	0.663	0.02170	0.02208	0.02190	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
589	Haul	4	2	46	484	974	2.01	92.57	Control	14	10	24	32.00	18.75	50.25	0.151	0.108	0.259	0.00473	0.00587	0.00516	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
590	Haul	4	2	19	484	974	2.01	38.24	Control	4	6	10	24.50	24.50	49.00	0.105	0.157	0.262	0.00427	0.00640	0.00534	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
593	Haul	4	2	30	484	974	2.01	60.37	Control	16	9	25	39.50	24.50	64.00	0.265	0.149	0.414	0.00671	0.00608	0.00647	2	0	2	0.03313	0.00000	0.03313	0.00084	0.00000	0.00052
594	Haul	4	2	13	484	974	2.01	26.16	Control	12	6	18	28.25	24.50	52.75	0.459	0.229	0.688	0.01624	0.00936	0.01304	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

606	Haul	4	3	30	581	834	1.61	48.23	Control	5	25	30	28.75	17.00	45.75	0.104	0.518	0.622	0.00367	0.03049	0.01375	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
612	Haul	4	3	6	581	834	1.61	8.65	Control	0	0	0	28.75	12.00	40.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
617	Haul	4	4	30	418	802	1.86	48.87	Control	27	14	96	39.50	20.75	60.25	0.443	0.707	0.775	0.01121	0.01358	0.01203	1	0	1	0.02013	0.00000	0.02013	0.00051	0.00000	0.00033
620	Haul	4	4	19	418	802	1.86	31.45	Control	36	23	59	57.00	32.00	89.00	1.145	0.731	1.876	0.02008	0.02785	0.02108	4	4	8	0.12717	0.12717	0.25434	0.00223	0.00397	0.00296
624	Haul	4	4	30	418	802	1.86	49.67	Control	84	125	209	39.50	39.50	79.00	1.691	2.517	4.208	0.04707	0.06372	0.05327	26	40	66	0.52351	0.80530	1.32880	0.01325	0.02039	0.01682
644	Haul	4	6	30	508	837	1.57	47.01	Control	0	0	0	12.00	24.50	36.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
646	Haul	4	6	30	508	837	1.57	47.01	Control	0	0	0	12.00	39.50	51.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
651	Haul	4	6	30	508	837	1.57	47.01	Control	0	6	6	8.50	21.00	29.50	0.000	0.170	0.170	0.00000	0.00810	0.00577	0	3	3	0.00000	0.06387	0.06387	0.00000	0.00304	0.00216
655	Haul	4	6	8	508	837	1.57	14.10	Control	0	7	7	14.50	74.50	89.00	0.000	0.496	0.496	0.00000	0.00886	0.00554	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
656	Haul	4	6	30	508	837	1.57	47.01	Control	7	89	96	14.50	74.50	89.00	0.043	1.468	1.510	0.00283	0.01970	0.01697	0	9	9	0.00000	0.19146	0.19146	0.00000	0.00257	0.00215
665	Haul	4	7	30	494	837	1.90	56.90	Control	0	6	6	9.50	15.75	25.25	0.000	0.105	0.105	0.00000	0.00669	0.00418	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
674	Haul	4	8	30	417	800	2.16	64.75	Control	14	27	41	12.00	12.00	24.00	0.216	0.417	0.633	0.01802	0.03475	0.02658	2	0	2	0.03089	0.00000	0.03089	0.00257	0.00000	0.00129
680	Haul	4	8	30	511	800	1.76	52.84	Control	0	0	0	28.25	18.25	46.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
685	Haul	4	9	90	511	800	1.76	154.51	Control	32	16	48	32.00	9.50	41.50	0.202	0.101	0.303	0.00631	0.01083	0.00730	1	2	3	0.00631	0.01262	0.01893	0.00070	0.00133	0.00046
686	Haul	4	9	17	511	800	1.76	29.84	Control	20	11	31	45.75	23.25	69.00	0.668	0.367	1.035	0.01440	0.01580	0.01501	3	0	3	0.10070	0.00000	0.10070	0.00219	0.00000	0.00145
690	Haul	4	10	30	463	832	1.90	53.91	Control	99	24	123	74.50	7.00	81.50	1.838	0.445	2.283	0.02465	0.06360	0.02800	2	0	2	0.03710	0.00000	0.03710	0.00050	0.00000	0.00046
706	Haul	4	10	30	463	832	1.90	53.91	Control	73	14	87	74.50	9.50	84.00	1.354	0.260	1.614	0.01818	0.02734	0.01971	3	0	3	0.05565	0.00000	0.05565	0.00075	0.00000	0.00066
716	Haul	4	11	30	378	791	2.09	62.61	Control	31	9	40	20.75	12.00	32.75	0.495	0.144	0.639	0.02306	0.01198	0.01951	1	0	1	0.01507	0.00000	0.01507	0.00077	0.00000	0.00049
717	Haul	4	11	30	379	791	2.09	62.61	Control	4	0	4	39.50	4.75	44.25	0.064	0.000	0.064	0.00162	0.00000	0.00144	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
718	Haul	4	11	21	379	791	2.09	43.83	Control	1	2	3	39.50	7.25	46.75	0.023	0.046	0.068	0.00054	0.00629	0.00146	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
727	Haul	4	12	30	434	806	2.09	62.63	Control	24	39	63	38.50	0.00	38.50	0.383	0.623	1.006	0.00870		0.02547	2	3	5	0.03194	0.04790	0.07984	0.00081		0.00207
728	Haul	4	12	30	434	806	2.09	62.63	Control	29	73	102	57.00	0.00	57.00	0.463	1.186	1.679	0.00812		0.02857	1	0	1	0.01507	0.00000	0.01507	0.00028		0.00028
729	Haul	4	12	30	434	806	2.09	62.63	Control	18	34	52	74.50	0.00	74.50	0.287	0.543	0.830	0.00386		0.01115	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
736	Haul	5	1	30	550	1037	1.86	55.85	Control	39	444	483	15.75	69.75	85.50	0.701	7.978	8.679	0.00449	0.11436	0.10151	0	15	15	0.00000	0.26953	0.26953	0.00000	0.00386	0.0031
737	Haul	5	1	30	550	1037	1.86	55.85	Control	57	278	335	24.50	100.00	124.50	1.024	4.995	6.019	0.04180	0.04985	0.04835	0	32	32	0.00000	0.57480	0.57480	0.00000	0.00575	0.0046
738	Haul	5	1	30	550	1037	1.86	56.85	Control	141	630	771	24.50	100.00	124.50	2.534	11.320	13.854	0.10341	0.11320	0.11127	6	61	67	0.10781	1.09608	1.20389	0.00440	0.01086	0.0096
739	Haul	5	1	30	550	1037	1.86	55.85	Control	173	439	612	24.50	87.85	112.35	3.109	7.888	10.997	0.12688	0.08979	0.09788	3	44	47	0.05391	0.79061	0.84452	0.00220	0.00900	0.0075
740	Haul	5	1	30	550	1037	1.86	55.85	Control	103	202	305	24.50	74.50	99.00	1.851	3.630	5.480	0.07554	0.04872	0.05536	4	20	24	0.07187	0.35937	0.43124	0.00293	0.00442	0.0043
741	Haul	5	1	30	550	1037	1.86	55.85	Control	126	265	391	32.00	74.50	106.50	2.264	4.762	7.026	0.07675	0.06391	0.06507	5	16	21	0.08984	0.28750	0.37734	0.00261	0.00386	0.0035
742	Haul	5	1	26	550	1037	1.86	48.23	Control	129	308	437	32.00	74.50	106.50	2.075	6.305	8.380	0.08358	0.08571	0.08507	8	23	31	0.16546	0.47686	0.64272	0.00518	0.00640	0.0060
743	Haul	5	1	30	550	1037	1.86	55.85	Control	58	174	232	24.50	57.00	81.50	1.042	3.127	4.169	0.04754	0.05485	0.05115	4	13	17	0.07187	0.23350	0.30546	0.00293	0.00410	0.0037
748	Haul	5	1	30	550	1037	1.86	55.85	Control	2	7	9	32.00	57.00	89.00	0.036	0.126	0.162	0.00112	0.00221	0.00182	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
755	Haul	5	2	12	380	773	1.98	23.78	Control	2	103	105	9.50	74.50	84.00	0.084	4.331	4.415	0.00085	0.05613	0.05256	0	5	5	0.00000	0.21022	0.21022	0.00000	0.00282	0.0075
756	Haul	5	2	30	380	773	1.98	59.46	Control	12	285	297	4.75	74.50	79.25	0.202	4.703	4.905	0.04269	0.05434	0.06303	0	27	27	0.00000	0.38088	0.38088	0.00000	0.00497	0.0046
769	Haul	5	3	30	542	1174	2.17	64.98	Control	15	137	152	12.00	100.00	112.00	0.231	2.108	2.339	0.01924	0.02108	0.02089	0	8	8	0.00000	0.12311	0.12311	0.00000	0.00123	0.0011
770	Haul	5	3	30	542	1174	2.17	64.98	Control	8	51	59	14.50	100.00	114.50	0.123	0.785	0.908	0.00849	0.00785	0.00793	1	0	1	0.01538	0.00000	0.01538	0.00106	0.00000	0.0001
775	Haul	5	3	30	542	1174	2.17	64.98	Control	47	242	289	7.00	74.50	81.50	0.723	3.724	4.447	0.10033	0.04989	0.05457	1	5	6	0.01538	0.07694	0.09233	0.00220	0.00103	0.0011
783	Haul	5	4	30	510	917	1.80	53.94	Control	2	24	26	12.00	57.00	69.00	0.037	0.445	0.482	0.00308	0.00781	0.00699	0	2	2	0.00000	0.03708	0.03708	0.00000	0.00065	0.0005
784	Haul	5	4	30	510	917	1.80	53.94	Control	3	54	57	7.00	57.00	64.00	0.056	1.001	1.057	0.00785	0.01758	0.01651	0	5	5	0.00000	0.00788	0.00788	0.00000	0.00163	0.0014
785	Haul	5	4	30	510	917	1.80	53.94	Control	5	177	182	12.00	74.50	86.50	0.093	3.281	3.374	0.00772	0.04404	0.03901	1	21	22	0.01854	0.38931	0.40785	0.00154	0.00523	0.0047
790	Haul	5	4	4	510	917	1.80	7.19	Control	0	7	7	2.50	32.00	34.50	0.000	0.973	0.973	0.00000	0.03042	0.02821	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
792	Haul	5	5	26	361	726	2.01	52.29	Control	15	307	322	14.50	39.50	54.00	0.287	5.871	6.158	0.01978	0.14864	0.11404	0	3	3	0.00000	0.05737	0.05737	0.00000	0.00145	0.0010
793	Haul	5	5	25	361	726	2.01	50.78	Control	8	152	160	15.75	57.00	72.75	0.150	3.023	3.173	0.01010	0.05304	0.04374	0	14	14	0.00000	0.27846	0.27846	0.00000	0.00489	0.0038
794	Haul	5	5	29	361	726	2.01	58.32	Control	19	87	106	17.00	74.50	91.50	0.326	1.492	1.818	0.01916	0.07002	0.01986	0	2	2	0.00000	0.03429	0.03429	0.00000	0.00046	0.0003
797	Haul	5	5	30	361	726	2.01	80.33	Control	1	63	64	7.00	39.50	46.50	0.017	1.044	1.061	0.00237	0.02644	0.02261	0	3	3	0.00000	0.04972	0.04972	0.00000	0.00126	0.0010
798	Haul	5	5	30	361	726	2.01	80.33	Control	14	131	145	17.00	74.50	91.50	0.237	2.171	2.408	0.01385	0.02815	0.02627	2	11	13	0.03315	0.18232	0.21547	0.00196	0.00245	0.0023
799	Haul	5	5	30	361	726	2.01	80.33	Control	15	81	96	12.00	39.50	51.50	0.240	1.343	1.581	0.02072	0.03389	0.03090	0	4	4	0.00000	0.08630	0.08630	0.00000	0.00168	0.0012
821	Haul	5	6	9	550	1147	2.05	18.47	Control	0	11	11	39.50	39.50	79.00	0.000	0.586	0.586	0.00000	0.01508	0.00754	0	1	1	0.00000	0.05415	0.05415	0.00000	0.00137	0.0006
840	Haul	5	7	8	582	1103	1.86	14.91	Control	7	127	134	4.75	74.50	79.25	0.805	8.185	8.990	0.10049	0.10087	0.11344	0	8	8	0.00000	0.53672	0.53672	0.00000	0.00720	0.0067
857	Haul	5	8	30	565	1020	1.84	55.14	Control	18	59	77	15.75	28.25	44.00	0.326	1.070	1.387	0.02073	0.03708	0.03174	1	2	3	0.01814	0.03627	0.05441	0.00115	0.00126	0.0012
858	Haul	5	8	30	565	1020	1.84	55.14	Control	9	53	62	12.00	74.50	86.50	0.163	0.961	1.125	0.01380	0.01280	0.01300	0	6	6	0.00000	0.10882	0.10882	0.00000	0.00146	0.0012
859	Haul	5	8	30	565	1020	1.84	55.14	Control	8	132	140	12.00	39.50	51.50	0.145	2.384	2.530	0.01209	0.06081	0.04831	0	3	3	0.00000	0.05441	0.05441	0.00000	0.00138	0.0010
869	Haul	5	10	30	442	1094	2.48	74.75	Control	18	49	67	7.00	12.00	19.00	0.247	0.660	0.907	0.03463	0.05438	0.04749	2	0	2	0.02693	0.00000	0.02693	0.00385	0.00000	0.0014
870	Haul	5	10	30	442	1094	2.48	74.75	Control	33	51	84	9.50	18.25	27.75	0.444	0.687	1.131	0.04679	0.03783	0.04077	4	1	5	0.05387	0.01347	0.06734	0.00567	0.00074	0.0024
878	Haul	5	11	30	415	829	2.00	50.83	Control	87	64	151	15.75	15.75	31.50	1.452	1.068	2.520	0.08217	0.06781	0.07809	5	0	5	0.08343	0.00000	0.08343	0.00530	0.00000	0.0026
879	Haul	5	11	30	415	829	2.00	50.83	Control	19	25	44	12.00	20.75	32.75	0.317	0.417	0.734	0.02642	0.02010	0.02247	2	2	4	0.03337	0.03337	0.06675	0.00278	0.00161	0.0020
880	Haul	5	11	30	415	829	2.00	50.83	Control	18	18	36	9.50	20.75	30.25	0.300	0.300	0.601	0.03162	0.01448	0.01986	3	0	3	0.05006	0.00000	0.05006	0.00527	0.00000	0.0016
881	Haul	5	11	17	415	829	2.00	33.96	Control	0	0	0	9.50	20.75	30.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
886	Haul	5	11	9	415	829	2.00	17.98	Control	1	3	4	9.50	9.50	19.00	0.056	0.167	0.222	0.00586	0.01757	0.01171	0	1	1	0.00000	0.05562	0.05562	0.00000	0.00546	0.0029
892	Haul	5	12	30	465	1202	2.58	77.55	Control	0	0	0	7.75	7.00	14.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
895	Haul	5	12	30	465	1202	2.58	77.56	Control	0	10	10	2.50	18.25	20.75	0.000	0.129	0.129	0.00000	0.00787	0.00521	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
904	Haul	5	12	30	465	1202	2.58	77.56	Control	2	16	18	2.50	15.75	18.25	0.076	0.208	0.232	0.01032	0.01398	0.01272	1	0	1	0.01290	0.00000	0.01290	0.00516	0.00000	0.0007
915	Haul	5	13	30	485	1153	2.38	71.32	Control	2	2	4	14.50	17.00	31.50	0.028	0.028	0.056	0.00183	0.00185	0.00178	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
920	Haul	5	13	30	485	1153	2.38	71.32	Control	10	7	17	14.50	17.00	31.50	0.140	0.098	0.238	0.00867	0.00577	0.00757	2	0	2	0.02804	0.00000	0.02804	0.00193	0.00000	0.0008
924	Haul	5	13	30	485	1153	2.38	71.32	Control	93	94	187	24.50	17.00	41.50	1.304	1.318	2.622	0.05327	0.07753	0.06318	7	3	10	0.09815	0.04206	0.14021	0.00401	0.00247	0.0033
937	Haul	5	14	30	480	1086	2.22	66.48	Control	39	49	88	24.50	32.00	56.50	0.587	0.737	1.324	0.02304	0.02303	0.02347	5	4	9	0.07520	0.06016	0.13536	0.00307	0.00188	0.0024
938	Haul	5	14	16	480	1086	2.22	35.48	Control	17	31	48	24.50	24.50	49.00	0.479	0.874	1.354	0.01957	0.03589	0.02782	0	2	2	0.00000	0.05640	0.05640	0.00000	0.00230	0.0011
948	Haul	5	15	27	385	785	1.98	53.65	Control	6	21	27	7.00	12.00	19.00	0.112	0.391	0.503	0.01580	0.03267	0.02649	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
949	Haul	5	16	30	298	889	2.98	89.50	Control	11	35	46	12.00	18.25	30.25	0.123	0.391	0.514	0.01024	0.02143	0.01699	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
950	Haul	5	16	30	298	889	2.98	89.50	Control	13	28	41	12.00	12.00	24.00	0.145	0.313	0.458	0.01710	0.02807	0.01909	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
SUMS				5017				10781.48		3104	6195	9300	4447.50	3153.85	7601.35							217	432	649						
MEANS				22				49.01		14.1091	28.1591	42.2727	20.22	14.34	34.55	0.258791	0.557138	0.810526	0.013416	0.018323	0.015454	0.98636	1.96364	2.95	0.01827	0.03902	0.05829	0.00095	0.00113	0.00116

143	Haul	2	3	30	367	842	2.29	68.83	Dyed	1	0	1	7.50	2.50	10.00	0.015	0.000	0.015	0.00194	0.00000	0.00145	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
144	Haul	2	3	30	367	842	2.29	68.83	Dyed	0	0	0	2.50	2.50	5.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
145	Haul	2	3	30	367	842	2.29	68.83	Dyed	2	0	2	2.50	0.00	2.50	0.029	0.000	0.029	0.01162		0.01162	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
146	Haul	2	3	30	367	842	2.29	68.83	Dyed	9	0	9	7.50	0.00	7.50	0.131	0.000	0.131	0.01743		0.01743	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
147	Haul	2	3	30	367	842	2.29	68.83	Dyed	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
148	Haul	2	3	20	367	842	2.29	45.89	Dyed	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
149	Haul	2	3	30	367	842	2.29	68.83	Dyed	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
150	Haul	2	3	30	367	842	2.29	68.83	Dyed	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
151	Haul	2	3	29	367	842	2.29	66.53	Dyed	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
152	Haul	2	3	30	367	842	2.29	68.83	Dyed	0	0	0	2.50	2.50	5.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
153	Haul	2	3	31	367	842	2.29	71.12	Dyed	27	0	27	7.50	0.00	7.50	0.380	0.000	0.380	0.05062		0.05067	1	0	1	0.01406	0.00000	0.01406	0.00187		0.00187
192	Haul	2	7	33	421	823	1.95	64.51	Dyed	80	0	80	17.50	0.00	17.50	0.930	0.000	0.930	0.05315		0.05315	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
193	Haul	2	7	33	421	823	1.95	64.51	Dyed	72	0	72	40.00	2.50	42.50	1.116	0.000	1.116	0.02780	0.00000	0.02676	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
194	Haul	2	7	31	421	823	1.95	60.60	Dyed	26	0	26	40.00	2.50	42.50	0.429	0.000	0.429	0.01073	0.00000	0.01009	1	0	1	0.01650	0.00000	0.01650	0.00041	0.00000	0.0003
195	Haul	2	7	30	421	823	1.95	58.65	Dyed	70	0	70	25.00	0.00	25.00	1.194	0.000	1.194	0.04774		0.04774	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
196	Haul	2	7	26	421	823	1.95	50.83	Dyed	11	0	11	40.00	0.00	40.00	0.216	0.000	0.216	0.00541		0.00541	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
200	Haul	2	7	30	421	823	1.95	58.65	Dyed	10	0	10	7.50	2.50	10.00	0.171	0.000	0.171	0.02274	0.00000	0.01705	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
201	Haul	2	7	27	421	823	1.95	52.78	Dyed	1	0	1	7.50	0.00	7.50	0.019	0.000	0.019	0.00753		0.00753	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
202	Haul	2	7	30	421	823	1.95	58.65	Dyed	0	0	0	12.50	0.00	12.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
203	Haul	2	7	30	421	823	1.95	58.65	Dyed	3	0	3	7.50	0.00	7.50	0.051	0.000	0.051	0.00682		0.00687	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
204	Haul	2	7	30	421	823	1.95	58.65	Dyed	4	0	4	17.50	2.50	20.00	0.088	0.000	0.088	0.00380	0.00000	0.00341	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
205	Haul	2	7	6	421	823	1.95	11.73	Dyed	13	13	26	25.00	2.50	27.50	1.108	1.108	2.217	0.04435	0.44334	0.08061	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
251	Haul	2	12	30	381	926	2.37	71.05	Dyed	15	0	15	17.50	0.00	17.50	0.211	0.000	0.211	0.01706		0.01706	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
252	Haul	2	12	4	381	926	2.37	9.47	Dyed	0	0	0	40.00	40.00	80.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
255	Haul	2	12	30	381	926	2.37	71.05	Dyed	5	0	5	7.50	0.00	7.50	0.070	0.000	0.070	0.00838		0.00838	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
256	Haul	2	12	6	381	926	2.37	14.21	Dyed	12	0	12	25.00	0.00	25.00	0.944	0.000	0.944	0.03378		0.03378	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
259	Haul	2	12	37	381	926	2.37	87.63	Dyed	29	0	29	40.00	0.00	40.00	0.331	0.000	0.331	0.00827		0.00827	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
261	Haul	2	12	38	381	926	2.37	89.99	Dyed	7	0	7	12.50	0.00	12.50	0.022	0.000	0.022	0.00178		0.00178	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
295	Haul	2	16	30	402	899	2.24	67.09	Dyed	14	0	14	17.50	0.00	17.50	0.209	0.000	0.209	0.01089		0.01658	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
296	Haul	2	16	30	402	899	2.24	67.00	Dyed	15	0	15	25.00	0.00	25.00	0.224	0.000	0.224	0.00894		0.00894	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
297	Haul	2	16	21	402	899	2.24	46.98	Dyed	29	0	29	40.00	0.00	40.00	0.618	0.000	0.618	0.01544		0.01544	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
301	Haul	2	16	30	402	899	2.24	67.00	Dyed	0	0	0	12.50	0.00	12.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
302	Haul	2	16	30	402	899	2.24	67.09	Dyed	0	0	0	17.50	0.00	17.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
303	Haul	2	16	30	402	899	2.24	67.09	Dyed	6	0	6	17.50	0.00	17.50	0.089	0.000	0.089	0.00511		0.00511	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
304	Haul	2	16	30	402	899	2.24	67.09	Dyed	0	0	0	17.50	0.00	17.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
305	Haul	2	16	30	407	899	2.24	67.09	Dyed	7	0	2	7.50	0.00	7.50	0.030	0.000	0.030	0.00397		0.00397	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
306	Haul	2	16	14	407	899	2.24	31.31	Dyed	9	0	9	12.50	2.50	15.00	0.787	0.000	0.787	0.02300	0.00000	0.01916	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
354	Haul	3	3	30	425	659	1.55	46.52	Dyed	0	0	0	4.75	0.00	4.75	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
355	Haul	3	3	20	425	659	1.55	31.01	Dyed	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
359	Haul	3	3	32	425	659	1.55	49.62	Dyed	0	0	0	20.75	2.50	23.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
360	Haul	3	3	30	425	659	1.55	46.57	Dyed	0	0	0	20.75	2.50	23.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
361	Haul	3	3	21	425	659	1.55	32.56	Dyed	0	0	0	28.25	2.50	30.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
391	Haul	3	5	6	515	673	1.31	7.84	Dyed	0	0	0	32.00	2.50	34.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
397	Haul	3	5	11	515	673	1.31	14.37	Dyed	0	0	0	57.00	0.00	57.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
435	Haul	3	8	30	503	718	1.43	42.87	Dyed	7	0	7	17.00	2.50	19.50	0.047	0.000	0.047	0.00275	0.00000	0.00240	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
436	Haul	3	8	3	503	718	1.43	4.29	Dyed	0	0	0	17.00	2.50	19.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
439	Haul	3	8	30	503	718	1.43	42.87	Dyed	0	0	0	12.00	2.50	14.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
440	Haul	3	9	28	503	718	1.43	39.97	Dyed	0	0	0	17.00	2.50	19.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
443	Haul	3	9	38	503	718	1.43	54.24	Dyed	0	0	0	12.00	2.50	14.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
444	Haul	3	9	10	503	718	1.43	14.27	Dyed	0	0	0	12.00	2.50	14.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
448	Haul	3	9	30	503	718	1.43	42.87	Dyed	0	0	0	24.50	2.50	27.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
449	Haul	3	9	26	503	718	1.43	37.11	Dyed	0	0	0	24.50	2.50	27.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
482	Haul	3	13	30	254	429	1.69	50.67	Dyed	0	0	0	24.50	2.50	27.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
483	Haul	3	13	9	254	429	1.69	15.20	Dyed	0	0	0	20.75	2.50	23.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
486	Haul	3	13	30	254	429	1.69	50.07	Dyed	0	0	0	14.50	2.50	17.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
487	Haul	3	13	9	254	429	1.69	15.20	Dyed	0	0	0	12.00	0.00	12.00	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.0000
489	Haul	3	13	30	254	429	1.69	50.67	Dyed	0	0	0	18.25	2.50	20.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
490	Haul	3	13	26	254	429	1.69	43.91	Dyed	0	0	0	28.25	2.50	30.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
519	Haul	3	17	13	192	245	1.28	16.50	Dyed	0	0	0	9.50	2.50	12.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
523	Haul	3	17	30	192	245	1.28	38.28	Dyed	0	0	0	15.75	2.50	18.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
524	Haul	3	17	23	192	245	1.28	29.35	Dyed	2	0	2	20.75	2.50	23.25	0.068	0.000	0.068	0.00378	0.00000	0.00293	1	0	1	0.03407	0.00000	0.03407	0.00164	0.00000	0.0014
536	Haul	3	19	30	301	378	1.26	37.67	Dyed	0	0	0	14.50	7.00	21.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
537	Haul	3	19	14	301	378	1.26	17.58	Dyed	0	0	0	12.00	4.75	16.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
540	Haul	3	19	30	301	378	1.26	37.67	Dyed	0	1	1	2.50	4.75	7.25	0.000	0.027	0.027	0.00000	0.00558	0.00366	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
541	Haul	3	18	11	301	378	1.26	13.81	Dyed	0	0	0	2.50	2.50	5.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00060	0.000
563	Haul	3	21	30	407	569	1.42	42.46	Dyed	3	4	7	32.00	39.50	71.50	0.071	0.094	0.165	0.00271	0.00238	0.00231	0	1	1	0.00000	0.02355	0.02355	0.00000	0.00078	0.003
564	Haul	3	21	32	407	569	1.42	45.29	Dyed	1	17	18	32.00	28.25	60.25	0.022	0.375	0.397	0.00069	0.01329	0.00660	0	1	1	0.00000	0.02208	0.02208	0.00000	0.00114	0.007
586	Haul	4	2	30	484	974	2.01	60.37	Dyed	0	1	1	25.75	14.50	40.25	0.001	0.017	0.017	0.00000	0.00194	0.00041	6	1	7	0.09938	0.01656	0.11595	0.00386	0.00000	0.000
587	Haul	4	2	9	484	974	2.01	18.11	Dyed	0	2	2	9.50	12.00	21.50	0.000	0.110	0.110	0.00000	0.00820	0.00514	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
591	Haul	4	2	30	484	974	2.01	60.37	Dyed	3	6	9	32.00	18.25	50.25	0.050	0.099	0.149	0.00155	0.00545	0.00297	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
592	Haul	4	2	24	484	974	2.01	48.30	Dyed	2	5	7	39.50	18.25	57.75	0.041	0.104	0.145	0.00105	0.00547	0.00251	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
595	Haul	4	2	30	484	974	2.01	60.37	Dyed	0	0	0	25.75	20.75	46.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
596	Haul	4	2	30	484	974	2.01	60.37	Dyed	2	2	4	28.25	15.75	44.00	0.033	0.033	0.066	0.00117	0.00210	0.00151	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
597	Haul	4	2	19	484	974	2.01	38.24	Dyed	0	0	0	20.75	12.00	32.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
634	Haul	4	5	30	581	972	1.67	50.19	Dyed	0	0	0	24.50	24.50	49.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
635	Haul	4	5	30	581	972	1.67	50.19	Dyed	2	0	2	32.00	39.50	71.50	0.040	0.000	0.040	0.00175	0.00000	0.00056	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
637	Haul	4	5	30	581	972	1.67	50.19	Dyed	0	2	2	7.00	24.50	31.50	0.000	0.040	0.040	0.00000	0.00163	0.00127	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
638	Haul	4	5	30	581	972	1.67	50.19	Dyed	0	2	2	9.50	32.00	41.50	0.000	0.040	0.040	0.00000	0.00125	0.00096	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.000
639	Haul	4	5	30	581	972	1.67	50.19	Dyed	0	0	0	12.00	32.00	44.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00
674	Haul	4	6	30	417	900	2.16	64.75	Dyed	0	0	0	7.00	7.00	14.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000			

880	Haul	4	8	30	417	800	2.16	64.75	Dyed	0	0	0	17.00	17.00	34.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
881	Haul	4	8	30	417	800	2.16	64.75	Dyed	2	1	3	17.00	17.00	34.00	0.031	0.015	0.046	0.00187	0.00091	0.00136	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
744	Haul	5	1	35	550	1037	1.86	64.83	Dyed	1	5	6	20.75	49.50	70.25	0.015	0.077	0.092	0.00074	0.00156	0.00132	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
745	Haul	5	1	30	550	1037	1.86	56.85	Dyed	4	7	11	17.00	39.50	56.50	0.072	0.126	0.198	0.00423	0.00318	0.00350	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
746	Haul	5	1	30	550	1037	1.86	56.85	Dyed	1	6	7	28.25	39.50	67.75	0.018	0.108	0.126	0.00064	0.00273	0.00186	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
747	Haul	5	1	30	550	1037	1.86	56.85	Dyed	0	2	2	32.00	39.50	71.50	0.000	0.036	0.036	0.00000	0.00091	0.00050	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
749	Haul	5	1	30	550	1037	1.86	56.85	Dyed	1	17	18	20.75	57.00	77.75	0.018	0.305	0.323	0.00087	0.00536	0.00416	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
750	Haul	5	1	17	550	1037	1.86	31.54	Dyed	0	5	5	24.50	39.50	64.00	0.000	0.159	0.159	0.00000	0.00401	0.00248	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
795	Haul	5	5	27	361	726	2.01	54.30	Dyed	0	5	5	20.75	74.50	95.25	0.000	0.092	0.092	0.00000	0.00124	0.00097	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
796	Haul	5	5	8	361	726	2.01	16.08	Dyed	0	5	5	23.75	57.00	80.75	0.000	0.311	0.311	0.00000	0.00545	0.00387	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
800	Haul	5	5	30	361	726	2.01	60.33	Dyed	2	14	16	12.00	74.50	86.50	0.033	0.232	0.265	0.00278	0.00311	0.00307	0	1	1	0.00000	0.01657	0.01657	0.00000	0.00027	0.00019
801	Haul	5	5	30	361	726	2.01	60.33	Dyed	0	4	4	17.00	74.50	91.50	0.000	0.066	0.066	0.00000	0.00089	0.00072	0	2	2	0.00000	0.03315	0.03315	0.00000	0.00044	0.00036
811	Haul	5	8	37	550	1147	2.05	75.82	Dyed	0	0	0	23.75	39.50	62.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
812	Haul	5	8	7	550	1147	2.05	14.36	Dyed	0	0	0	39.50	39.50	79.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
816	Haul	5	8	30	550	1147	2.05	61.56	Dyed	0	0	0	7.00	39.50	46.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
817	Haul	5	8	30	550	1147	2.05	61.56	Dyed	0	0	0	12.00	39.50	51.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
818	Haul	5	8	30	550	1147	2.05	61.56	Dyed	1	0	1	14.50	32.00	46.50	0.016	0.000	0.016	0.00112	0.00000	0.00035	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
819	Haul	5	8	30	550	1147	2.05	61.56	Dyed	0	0	0	8.50	17.00	26.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
820	Haul	5	8	9	550	1147	2.05	18.47	Dyed	0	0	0	24.50	24.50	49.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
823	Haul	5	8	30	550	1147	2.05	61.56	Dyed	3	9	12	7.00	17.00	24.00	0.049	0.146	0.195	0.00696	0.00860	0.00812	1	0	1	0.01625	0.00000	0.01625	0.00232	0.00000	0.00068
824	Haul	5	8	30	550	1147	2.05	61.56	Dyed	0	8	8	14.50	20.75	35.25	0.000	0.130	0.130	0.00000	0.00626	0.00360	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
882	Haul	5	11	30	415	829	2.00	50.83	Dyed	2	0	2	9.50	24.50	34.00	0.033	0.000	0.033	0.00351	0.00000	0.00098	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
883	Haul	5	11	30	415	829	2.00	50.83	Dyed	0	1	1	7.00	9.50	16.50	0.000	0.017	0.017	0.00000	0.00176	0.00101	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
884	Haul	5	11	19	415	829	2.00	37.85	Dyed	0	0	0	9.50	7.00	16.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
885	Haul	5	11	30	415	829	2.00	50.83	Dyed	0	0	0	7.00	9.50	16.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
887	Haul	5	11	30	415	829	2.00	50.83	Dyed	1	0	1	7.00	12.00	19.00	0.017	0.000	0.017	0.00238	0.00000	0.00088	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
888	Haul	5	11	30	415	829	2.00	50.83	Dyed	2	0	2	7.00	12.00	19.00	0.033	0.000	0.033	0.00477	0.00000	0.00176	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
889	Haul	5	11	14	415	829	2.00	27.97	Dyed	2	0	2	7.00	7.00	14.00	0.072	0.000	0.072	0.01022	0.00000	0.00511	0	0	0	0.00000	0.00007	0.00000	0.00000	0.00000	0.00000
894	Haul	5	12	30	406	1207	2.58	77.55	Dyed	0	0	0	4.75	12.00	16.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SUMS:				2862				5520.73		497	149	841	1893.25	1411.75	3305.00															
MEANS:				26				50.19		4.47273	1.35455	5.82727	17.21	12.83	30.05	0.047679	0.035883	0.123762	0.004727	0.00701	0.005147	0.09091	0.05455	0.14545	0.00164	0.00102	0.00266	0.00009	0.00004	0.00008

158	Haul	2	4	30	440	879	2.00	50.93	No Offal	4	0	4	2.50	0.00	2.50	0.067	0.000	0.067	0.02670		0.02670	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
160	Haul	2	4	32	440	879	2.00	63.93	No Offal	20	0	20	2.50	2.50	5.00	0.313	0.000	0.313	0.12514	0.00000	0.06257	4	0	4	0.06257	0.00000	0.06257	0.02503	0.00000	0.01751
161	Haul	2	4	30	440	879	2.00	50.93	No Offal	32	0	32	12.50	2.50	15.00	0.534	0.000	0.534	0.04272	0.00000	0.03560	4	0	4	0.06674	0.00000	0.06674	0.00534	0.00000	0.00445
162	Haul	2	4	30	440	879	2.00	50.93	No Offal	4	0	4	12.50	0.00	12.50	0.067	0.000	0.067	0.00534		0.00534	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
163	Haul	2	4	30	440	879	2.00	50.93	No Offal	0	0	0	7.50	2.50	10.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
164	Haul	2	4	30	440	879	2.00	50.93	No Offal	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
165	Haul	2	4	30	440	879	2.00	50.93	No Offal	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
166	Haul	2	4	30	440	879	2.00	50.93	No Offal	24	0	24	2.50	0.00	2.50	0.400	0.000	0.400	0.16018		0.16018	2	0	2	0.03337	0.00000	0.03337	0.01335		0.01335
167	Haul	2	4	30	440	879	2.00	50.93	No Offal	40	0	40	12.50	0.00	12.50	0.667	0.000	0.667	0.05339		0.05339	4	0	4	0.06674	0.00000	0.06674	0.00534		0.00534
206	Haul	2	8	30	356	806	2.54	76.35	No Offal	57	0	57	12.50	0.00	12.50	0.747	0.000	0.747	0.05973		0.05973	3	0	3	0.03929	0.00000	0.03929	0.00314		0.00314
207	Haul	2	8	30	356	806	2.54	76.35	No Offal	9	0	9	12.50	0.00	12.50	0.118	0.000	0.118	0.00943		0.00943	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
208	Haul	2	8	30	356	806	2.54	76.35	No Offal	49	0	49	17.50	0.00	17.50	0.642	0.000	0.642	0.03667		0.03667	2	0	2	0.02620	0.00000	0.02620	0.00150		0.00150
209	Haul	2	8	23	356	806	2.54	58.53	No Offal	25	0	25	17.50	0.00	17.50	0.427	0.000	0.427	0.02441		0.02441	2	0	2	0.03417	0.00000	0.03417	0.00195		0.00195
214	Haul	2	8	30	356	806	2.54	76.35	No Offal	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
215	Haul	2	8	30	356	806	2.54	76.35	No Offal	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
216	Haul	2	8	12	356	806	2.54	30.54	No Offal	3	0	3	7.50	0.00	7.50	0.098	0.000	0.098	0.01310		0.01310	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
238	Haul	2	11	34	422	832	2.21	75.08	No Offal	8	0	8	2.50	0.00	2.50	0.107	0.000	0.107	0.04262		0.04262	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
239	Haul	2	11	35	422	832	2.21	77.30	No Offal	13	0	13	12.50	0.00	12.50	0.168	0.000	0.168	0.01345		0.01345	1	0	1	0.01294	0.00000	0.01294	0.00103		0.00103
240	Haul	2	11	33	422	832	2.21	72.88	No Offal	1	0	1	12.50	0.00	12.50	0.014	0.000	0.014	0.00110		0.00110	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
241	Haul	2	11	30	422	832	2.21	66.26	No Offal	0	0	0	2.50	0.00	2.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
245	Haul	2	11	8	422	832	2.21	17.67	No Offal	0	0	0	7.50	0.00	7.50	0.000	0.000	0.000	0.00000		0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
246	Haul	2	11	30	422	832	2.21	66.26	No Offal	14	0	14	12.50	0.00	12.50	0.211	0.000	0.211	0.01690		0.01690	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
247	Haul	2	11	30	422	832	2.21	66.26	No Offal	8	0	8	7.50	0.00	7.50	0.121	0.000	0.121	0.01610		0.01610	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
248	Haul	2	11	30	422	832	2.21	66.26	No Offal	42	0	42	25.00	0.00	25.00	0.634	0.000	0.634	0.02536		0.02536	5	0	5	0.07546	0.00000	0.07546	0.00302		0.00302
249	Haul	2	11	28	422	832	2.21	61.84	No Offal	56	0	56	40.00	0.00	40.00	0.906	0.000	0.906	0.02264		0.02264	6	0	6	0.09703	0.00000	0.09703	0.00243		0.00243
286	Haul	2	15	30	420	895	2.13	63.83	No Offal	22	0	22	25.00	0.00	25.00	0.344	0.000	0.344	0.01377		0.01377	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
287	Haul	2	15	34	420	895	2.13	72.45	No Offal	42	0	42	7.50	2.50	10.00	0.580	0.000	0.580	0.07729	0.00000	0.05797	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
288	Haul	2	15	32	420	895	2.13	68.19	No Offal	0	0	0	12.50	2.50	15.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
289	Haul	2	15	34	420	895	2.13	72.45	No Offal	0	0	0	2.50	2.50	5.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
290	Haul	2	15	30	420	895	2.13	63.83	No Offal	3	0	3	7.50	2.50	10.00	0.047	0.000	0.047	0.00626	0.00000	0.00469	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
291	Haul	2	15	30	420	895	2.13	63.83	No Offal	0	0	0	7.50	2.50	10.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
293	Haul	2	15	32	420	895	2.13	68.19	No Offal	207	6	213	40.00	2.50	42.50	3.036	0.088	3.124	0.07589	0.03520	0.07350	11	0	11	0.16131	0.00000	0.16131	0.00403	0.00000	0.00380
370	Haul	3	4	31	464	805	1.30	40.42	No Offal	33	0	33	57.00	2.50	59.50	0.816	0.000	0.816	0.01437	0.00000	0.01372	1	0	1	0.02474	0.00000	0.02474	0.00043	0.00000	0.00042
371	Haul	3	4	31	464	805	1.30	40.42	No Offal	35	0	35	74.50	2.50	77.00	0.866	0.000	0.866	0.01162	0.00000	0.01125	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
373	Haul	3	4	32	464	805	1.30	41.72	No Offal	25	0	25	57.00	2.50	59.50	0.599	0.000	0.599	0.01051	0.00000	0.01007	2	0	2	0.04793	0.00000	0.04793	0.00084	0.00000	0.00081
374	Haul	3	4	30	464	805	1.30	39.12	No Offal	32	0	32	39.50	2.50	42.00	0.818	0.000	0.818	0.02071	0.00000	0.01948	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
375	Haul	3	4	30	464	805	1.30	39.12	No Offal	34	0	34	57.00	2.50	59.50	0.869	0.000	0.869	0.01525	0.00000	0.01461	4	0	4	0.10226	0.00000	0.10226	0.00179	0.00000	0.00172
376	Haul	3	4	37	464	805	1.30	48.24	No Offal	37	0	37	57.00	2.50	59.50	0.767	0.000	0.767	0.01346	0.00000	0.01289	7	0	7	0.14510	0.00000	0.14510	0.00255	0.00000	0.00244
409	Haul	3	7	30	478	770	1.61	48.33	No Offal	4	0	4	74.50	2.50	77.00	0.083	0.000	0.083	0.00111	0.00000	0.00107	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
410	Haul	3	7	32	478	770	1.61	51.55	No Offal	16	0	16	74.50	2.50	77.00	0.310	0.000	0.310	0.00417	0.00000	0.00403	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
411	Haul	3	7	30	478	770	1.61	48.33	No Offal	29	0	29	74.50	2.50	77.00	0.600	0.000	0.600	0.00805	0.00000	0.00779	0	1	1	0.00000	0.02069	0.02069	0.00000	0.00828	0.00027
412	Haul	3	7	30	478	770	1.61	48.33	No Offal	10	0	10	39.50	2.50	42.00	0.207	0.000	0.207	0.00524	0.00000	0.00493	4	0	4	0.08277	0.00000	0.08277	0.00210	0.00000	0.00197
414	Haul	3	7	30	478	770	1.61	48.33	No Offal	0	0	0	32.00	2.50	34.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
415	Haul	3	7	31	478	770	1.61	49.94	No Offal	14	3	17	39.50	2.50	42.00	0.280	0.060	0.340	0.00710	0.02403	0.00811	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
416	Haul	3	7	30	478	770	1.61	48.33	No Offal	1	0	1	49.50	2.50	52.00	0.021	0.000	0.021	0.00042	0.00000	0.00040	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
418	Haul	3	7	19	478	770	1.61	30.61	No Offal	0	0	0	23.25	2.50	25.75	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
461	Haul	3	11	30	437	715	1.64	49.08	No Offal	9	0	9	32.00	0.00	32.00	0.183	0.000	0.183	0.00573		0.00573	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
462	Haul	3	11	30	437	715	1.64	49.08	No Offal	19	0	19	39.50	0.00	39.50	0.387	0.000	0.387	0.00980		0.00980	2	0	2	0.04075	0.00000	0.04075	0.00103		0.00103
463	Haul	3	11	30	437	715	1.64	49.08	No Offal	14	0	14	43.25	2.50	45.75	0.285	0.000	0.285	0.00658	0.00000	0.00623	2	0	2	0.04075	0.00000	0.04075	0.00094	0.00000	0.00089
465	Haul	3	11	30	437	715	1.64	49.08	No Offal	0	0	0	12.00	2.50	14.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
466	Haul	3	11	30	437	715	1.64	49.08	No Offal	0	0	0	15.75	2.50	18.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
468	Haul	3	11	20	437	715	1.64	32.72	No Offal	2	0	2	32.00	2.50	34.50	0.061	0.000	0.061	0.00191	0.00000	0.00177	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
469	Haul	3	11	32	437	715	1.64	52.36	No Offal	0	0	0	25.75	2.50	28.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
501	Haul	3	15	30	377	533	1.41	42.41	No Offal	5	0	5	12.00	2.50	14.50	0.118	0.000	0.118	0.00982	0.00000	0.00813	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
502	Haul	3	15	8	377	533	1.41	11.31	No Offal	1	0	1	12.00	2.50	14.50	0.088	0.000	0.088	0.00737	0.00000	0.00610	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
503	Haul	3	15	30	377	533	1.41	42.41	No Offal	5	0	5	12.00	0.00	12.00	0.118	0.000	0.118	0.00982		0.00982	0	0	0	0.00000	0.00000	0.00000	0.00000		0.00000
506	Haul	3	15	30	377	533	1.41	42.41	No Offal	1	0	1	7.00	2.50	9.50	0.024	0.000	0.024	0.00337	0.00000	0.00248	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
507	Haul	3	15	30	377	533	1.41	42.41	No Offal	1	0	1	9.50	2.50	12.00	0.024	0.000	0.024	0.00248	0.00000	0.00196	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
508	Haul	3	15	30	377	533	1.41	42.41	No Offal	0	0	0	9.50	2.50	12.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
509	Haul	3	15	30	377	533	1.41	42.41	No Offal	0	0	0	9.50	7.50	17.00	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
510	Haul	3	15	20	377	533	1.41	28.28	No Offal	5	1	6	7.00	2.50	9.50	0.177	0.035	0.212	0.07526	0.01415	0.02234	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
557	Haul	3	21	29	402	569	1.42	41.05	No Offal	1	3	4	24.50	14.50	39.00	0.024	0.073	0.097	0.00099	0.00504	0.00250	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
558	Haul	3	21	31	402	569	1.42	43.88	No Offal	5	4	9	20.75	12.00	32.75	0.114	0.091	0.205	0.00549	0.00760	0.00626	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
559	Haul	3	21	35	402	569	1.42	49.54	No Offal	13	11	24	24.50	14.50	39.00	0.262	0.222	0.484	0.01071	0.01531	0.01242	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
560	Haul	3	21	30	402	569	1.42	42.46	No Offal	10	6	16	14.50	12.00	26.50	0.236	0.141	0.377	0.01624	0.01178	0.01422	1	0	1	0.02355	0.00000	0.02355	0.00162	0.00000	0.00089
562	Haul	3	21	12	402	569	1.42	16.98	No Offal	0	0	0	32.00	24.50	56.50	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
613	Haul	4	4	30	418	892	1.86	49.67	No Offal	34	26	60	74.50	20.75	95.25	0.685	0.524	1.208	0.00919	0.02523	0.01268	7	4	11	0.14094	0.08054	0.22148	0.00189	0.00388	0.00233
614	Haul	4	4	30	418	892	1.86	49.67	No Offal	35	47	82	74.50	20.75	95.25	0.705	0.946	1.651	0.00946	0.04561	0.01733	6	1	7	0.12081	0.02013	0.14094	0.00162	0.00097	0.00148
615	Haul	4	4	30	418	892	1.86	49.67	No Offal	17	24	41	57.00	24.50	81.50	0.342	0.483	0.826	0.00601	0.01972	0.01013	1	0	1	0.02013	0.00000	0.02013	0.00035	0.00000	0.00025
616	Haul	4	4	30	418	892	1.86	49.67	No Offal	33	22	55	57.00	24.50	81.50	0.664	0.443	1.107	0.01166	0.01808	0.01358	1	1	2	0.02013	0.02013	0.04027	0.00035	0.00082	0.00049
618	Haul	4	4	30	418	892	1.86	49.67	No Offal	20	48	68	57.00	32.00	89.00	0.403	0.966	1.369	0.00708	0.03020	0.01538	0	7	7	0.00000	0.14094	0.14094	0.00000	0.00440	0.00158
619	Haul	4	4	30	418	892	1.86	49.67	No Offal	35	50	85	57.00	32.00	89.00	0.705	1.007	1.711	0.01236	0.03146	0.01923	1	5	6	0.02013	0.10067	0.12081	0.00035	0.00315	0.00136
621	Haul	4	4	30	418	892	1.86	49.67	No Offal	79	75	154	49.50	32.00	81.50	1.591	1.510	3.101	0.03213	0.04719	0.03805	7	6	13	0.14094	0.12081	0.26175	0.00285	0.00378	0.00321
622	Haul	4	4	30	418	892	1.86	49.67	No Offal	209	190	399	74.50	39.50	114.00	4.208	3.826	8.034	0.05648	0.09685	0.07047	19	10	29	0.38256	0.20135	0.58391	0.00514	0.00510	0.00512
623	Haul	4	4	30	418	892	1.86	49.67	No Offal	39	52	91	39.50	32.00	71.50	0.785	1.047	1.832	0.01988	0.03272	0.02563	2	11	13	0.04027	0.22148	0.26175	0.00102	0.00692	0.00366
660	Haul	4	7	30	494	937	1.90	56.90	No Offal	64	113	177	28.25	39.50	67.75	1.125	1.986	3.111	0.03981	0.05027	0.04591	4	12	16	0.07030	0.21089	0.28118	0.00249	0.00534	0.00415
661	Haul	4	7	30	494	937	1.90	56.90	No Offal	30	53	83	39.50	32.00	71.50	0.527	0.931	1.459	0.01335	0.02911	0.02040	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
662	Haul	4	7	30	494	937	1.90	56.90	No Offal	53	51	104	23.25	28.25	51.50	0.931	0.896	1.828	0.04006	0.03173	0.03549	5	11	16	0.08787	0.19331	0.28118	0.00378	0.00684	0.00546
663	Haul	4	7	30	494	937	1.90	56.90	No Offal	0	2	2	12.00	9.50	21.50	0.000	0.035	0.035	0.00000	0.00370	0.00163	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
664	Haul	4	7	30	494	937	1.90	56.90	No Offal	3	0	3	7.00	9.50	16.50	0.053	0.000	0.053	0.00753	0.00000	0.00320	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
666	Haul	4	7	30	494	937	1.90	56.90	No Offal	6	9	15	9.50	20.75	30.25	0.105	0.158	0.264	0.01110	0.00762	0.00872	1	0	1	0.01757	0.00000	0.01757	0.00185	0.00000	0.00058
667	Haul	4	7	30	494	937	1.90	56.90	No Offal	10	15	25	12.00	24.50	36.50	0.176	0.264	0.439	0.01464	0.01076	0.01204	1	4	5	0.01757	0.07030	0.08787	0.00146	0.00287	0.00241
668	Haul	4	7	30	494	937	1.90	56.90	No Offal	6	39	45	14.50	28.25	42.75	0.105	0.685	0.791	0.00727	0.02426	0.01850	0	3	3	0.00000	0.05272	0.05272	0.00000	0.00187	0.00123
669	Haul	4	7	30	494	937	1.90	56.90	No Offal	8	18	26	15.75	20.75	36.50	0.141	0.316	0.457	0.00893	0.01524	0.01252	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
670	Haul	4	7	17	494	937	1.90	32.24	No Offal	8	28	36	9.50	20.75	30.25	0.248	0.868	1.116	0.02612	0.04185	0.03691	0	1	1	0.00000	0.03101	0.03101	0.00000	0.00149	0.00103
709	Haul	4	11	30	379	791	2.09	62.61	No Offal	138	12	150	39.50	2.50	42.00	2.204	0.192	2.396	0.05580	0.07666	0.05704	1	0	1	0.01597	0.00000	0.01597	0.00040	0.00000	0.00038
710	Haul	4	11	30	379	791	2.09	62.61	No Offal	158	35	193	57.00	7.00	64.00	2.523	0.559	3.082	0.04427	0.07986	0.04816	2	0	2	0.03194	0.00000	0.03194	0.00056	0.00000	0.00050
711	Haul	4	11	30	379	791	2.09	62.61	No Offal	68	22	90	57.00	4.75	61.75	1.086	0.351	1.437	0.01905	0.07397	0.02328	3	0	3	0.04791	0.00000	0.04791	0.00084	0.00000	0.00078
712	Haul	4	11	30	379	791	2.09	62.61	No Offal	74	9	83	24.50	4.75	29.25	1.182	0.144	1.326	0.04824	0.03026	0.04532	1	2	3	0.01597	0.03194	0.04791	0.00065	0.00672	0.00164
713	Haul	4	11	30	379	791	2.09	62.61	No Offal	62	19	81	32.00	9.50	41.50	0.990	0.303	1.294	0.03094	0.03194	0.03117	3	0	3	0.04791	0.00000	0.04791	0.00150	0.00000	0.00115
714	Haul	4	11	30	379	791	2.09	62.61	No Offal	173	25	198	32.00	7.00	39.00	2.763	0.399	3.162	0.08635	0.05704	0.08109	5	2	7	0.07986	0.03194	0.11180	0.00250	0.00456	0.00287
715	Haul	4	11	32	379	791	2.09	66.78	No Offal	176	23	199	57.00	9.50	66.50	2.635	0.344	2.980	0.04623	0.03625	0.04481	11	3	14	0.16470	0.04492	0.20962	0.00289	0.00473	0.00315
809	Haul	5	8	30	550	1147	2.05	61.56	No Offal	9	57	66	7.00	24.50	31.50	0.146	0.926	1.072	0.02089	0.03780	0.03404	0	1	1	0.00000	0.01625	0.01625	0.00000	0.00066	0.0005.
810	Haul	5	8	30	550	1147	2.05	61.56	No Offal	9	96	105	9.50	49.50	59.00	0.146	1.560	1.706	0.01539	0.03151	0.02891	2	14	16	0.03249	0.22743	0.25992	0.00342	0.00459	0.0044
813	Haul	5	8	30	550	1147	2.05	61.56	No Offal	10	58	68	18.75	32.00	50.75	0.162	0.942	1.105	0.00890	0.02944	0.02178	0	4	4	0.00000	0.06498	0.06498	0.00000	0.00203	0.0012:
814	Haul	5	8	30	550	1147	2.05	61.56	No Offal	1	39	40	7.25	20.75	28.00	0.016	0.634	0.650	0.00224	0.03053	0.02321	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
815	Haul	5	8	30	550	1147	2.05	61.56	No Offal	0	31	31	7.00	20.75	27.75	0.000	0.504	0.504	0.00000	0.02427	0.01815	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
822	Haul	5	8	7	550	1147	2.05	14.36	No Offal	8	14	22	12.00	24.50	36.50	0.557	0.975	1.532	0.04642	0.03978	0.04196	1	2	3	0.06967	0.13925	0.20887	0.00580	0.00568	0.0057
848	Haul	5	9	30	565	1070	1.84	55.14	No Offal	30	420	450	4.75	57.00	61.75	0.544	7.618	8.162	0.11455	0.13364	0.13217	0	12	12	0.00000	0.21765	0.21765	0.00000	0.00382	0.0035
849	Haul	5	9	30	565	1070	1.84	55.14	No Offal	23	238	261	9.50	39.50	49.00	0.417	4.317	4.734	0.04391	0.10926	0.09661	0	19	19	0.00000	0.34461	0.34461	0.00000	0.00872	0.0070
850	Haul	5	9	30	565	1070	1.84	55.14	No Offal	28	130	158	12.00	32.00	44.00	0.508	2.358	2.866	0.04232	0.07368	0.06513	1	7	8	0.01814	0.12696	0.14510	0.00151	0.00397	0.0033
851	Haul	5	9	30	565	1070	1.84	55.14	No Offal	25	295	320	14.50	39.50	54.00	0.453	5.350	5.804	0.03127	0.13546	0.10748	0	13	13	0.00000	0.23578	0.23578	0.00000	0.00597	0.0043
852	Haul	5	9	30	565	1070	1.84	55.14	No Offal	36	149	185	24.50	32.00	56.50	0.653	2.702	3.355	0.02665	0.08445	0.05939	2	7	9	0.03627	0.12696	0.16324	0.00148	0.00397	0.0029
853	Haul	5	9	30	565	1070	1.84	55.14	No Offal	11	115	126	12.00	39.50	51.50	0.200	2.086	2.285	0.01663	0.05280	0.04437	0	4	4	0.00000	0.07255	0.07255	0.00000	0.00184	0.0014
854	Haul	5	9	30	565	1070	1.84	55.14	No Offal	21	119	140	9.50	24.50	34.00	0.381	2.158	2.539	0.04009	0.08810	0.07468	0	2	2	0.00000	0.03627	0.03627	0.00000	0.00148	0.001C
855	Haul	5	9	30	565	1070	1.84	55.14	No Offal	54	168	222	12.00	39.50	51.50	0.979	3.047	4.026	0.08162	0.07714	0.07818	1	5	6	0.01814	0.09069	0.10882	0.00151	0.00230	0.0021
856	Haul	5	9	30	565	1020	1.84	55.14	No Offal	44	143	187	9.75	57.00	66.75	0.798	2.594	3.392	0.08185	0.04550	0.05081	7	10	17	0.12696	0.18137	0.30833	0.01302	0.00318	0.0046
907	Haul	5	13	30	485	1153	2.38	71.32	No Offal	143	65	208	20.75	18.25	39.00	2.005	0.911	2.916	0.09663	0.04994	0.07478	4	2	6	0.05609	0.02804	0.08413	0.00270	0.00154	0.0021
908	Haul	5	13	16	485	1153	2.38	38.04	No Offal	57	56	113	17.00	12.00	29.00	1.490	1.472	2.971	0.08815	0.12268	0.10244	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
909	Haul	5	13	30	485	1153	2.38	71.32	No Offal	27	33	60	20.75	20.75	41.50	0.379	0.463	0.841	0.01824	0.02230	0.02027	2	2	4	0.02804	0.02804	0.05609	0.00135	0.00135	0.0013
910	Haul	5	13	30	485	1153	2.38	71.32	No Offal	55	46	101	14.50	14.50	29.00	0.771	0.645	1.416	0.05318	0.04449	0.04883	1	2	3	0.01402	0.02804	0.04206	0.00097	0.00193	0.0014
911	Haul	5	13	30	485	1153	2.38	71.32	No Offal	56	33	89	14.50	9.50	24.00	0.785	0.463	1.248	0.05415	0.04871	0.05200	1	0	1	0.01402	0.00000	0.01402	0.00097	0.00000	0.0005
912	Haul	5	13	30	485	1153	2.38	71.32	No Offal	34	41	75	12.00	7.00	19.00	0.477	0.575	1.052	0.03973	0.08213	0.05535	1	0	1	0.01402	0.00000	0.01402	0.00117	0.00000	0.0007
913	Haul	5	13	30	485	1153	2.38	71.32	No Offal	23	14	37	12.00	9.50	21.50	0.322	0.196	0.519	0.02687	0.02066	0.02413	1	1	2	0.01402	0.01402	0.02804	0.00117	0.00148	0.0013
914	Haul	5	13	30	485	1153	2.38	71.32	No Offal	1	1	2	14.50	14.50	29.00	0.014	0.014	0.028	0.00097	0.00097	0.00097	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
921	Haul	5	13	30	485	1153	2.38	71.32	No Offal	13	7	20	20.75	17.00	37.75	0.182	0.098	0.280	0.00878	0.00577	0.00743	1	0	1	0.01402	0.00000	0.01402	0.00068	0.00000	0.0002
922	Haul	5	13	30	485	1153	2.38	71.32	No Offal	8	6	14	20.75	12.00	32.75	0.112	0.084	0.196	0.00541	0.00701	0.00598	1	0	1	0.01402	0.00000	0.01402	0.00068	0.00000	0.0004
923	Haul	5	13	30	485	1153	2.38	71.32	No Offal	85	42	127	24.50	7.00	31.50	1.192	0.589	1.781	0.04865	0.08413	0.05653	2	2	4	0.02804	0.02804	0.05609	0.00114	0.00401	0.0017
951	Haul	5	16	30	298	889	2.98	89.50	No Offal	8	11	19	12.00	14.50	26.50	0.089	0.123	0.212	0.00745	0.00848	0.00801	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
957	Haul	5	17	30	440	1178	2.68	80.32	No Offal	0	0	0	2.50	9.75	12.25	0.000	0.000	0.000	0.00000	0.00000	0.00000	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000
977	Haul	5	18	30	579	1260	2.18	65.28	No Offal	0	2	2	7.00	7.00	14.00	0.000	0.031	0.031	0.00000	0.00438	0.00219	0	0	0	0.00000	0.00000	0.00000	0.00000	0.00000	0.0000

APPENDIX H: CPUE DATA TABLES

Filename: FinCPUE

Effect of Dyed Baits on Target and Marketable Fish Catch: Trips 1 through 5

Trip#	Set#	Total Hook #	# Dyed Hooks	# Cont Hooks	Dyed Target Catch (abs)	Dyed Target CPUE (fish/hook)	Cont Target Catch (abs)	Cont Target CPUE (fish/hook)	Greater CPUE?	Dyed Mar Catch (abs)	Dyed Mar CPUE (fish/hook)	Cont Mar Catch (abs)	Cont Mar CPUE (fish/hook)	Greater CPUE?
1	4	2265	1546	719	8	0.0052	3	0.0042	w/Dyed	15	0.0097	6	0.0083	w/Dyed
1	8	2180	1629	551	12	0.0074	2	0.0036	w/Dyed	36	0.0221	7	0.0127	w/Dyed
2	3	842	686	156	4	0.0058	1	0.0064	w/Control	20	0.0292	10	0.0641	w/Control
2	7	823	643	180	5	0.0078	0	0.0000	w/Dyed	7	0.0109	1	0.0056	w/Dyed
2	12	926	450	476	5	0.0111	1	0.0021	w/Dyed	8	0.0178	10	0.0210	w/Control
2	16	899	540	359	0	0.0000	1	0.0028	w/Control	1	0.0019	1	0.0028	w/Control
3	3	659	278	381	7	0.0252	11	0.0289	w/Control	9	0.0324	20	0.0525	w/Control
3	5	673	36	637	2	0.0556	12	0.0188	w/Dyed	2	0.0556	20	0.0314	w/Dyed
3	9	718	342	376	11	0.0322	16	0.0426	w/Control	22	0.0643	30	0.0798	w/Control
3	13	429	240	189	4	0.0167	0	0.0000	w/Dyed	6	0.0250	3	0.0159	w/Dyed
3	17	245	101	144	4	0.0396	4	0.0278	w/Dyed	6	0.0594	7	0.0486	w/Dyed
3	19	378	180	198	0	0.0000	9	0.0455	w/Control	0	0.0000	11	0.0556	w/Control
3	21	569	107	462	2	0.0187	7	0.0152	w/Dyed	4	0.0374	8	0.0173	w/Dyed
4	2	974	418	556	14	0.0335	16	0.0288	w/Dyed	26	0.0622	28	0.0504	w/Dyed
4	5	972	339	633	9	0.0265	7	0.0111	w/Dyed	28	0.0826	20	0.0316	w/Dyed
4	8	900	272	628	3	0.0110	3	0.0048	w/Dyed	8	0.0294	7	0.0111	w/Dyed
5	1	1037	428	609	7	0.0164	3	0.0049	w/Dyed	14	0.0327	8	0.0131	w/Dyed
5	5	726	228	496	13	0.0570	11	0.0222	w/Dyed	14	0.0614	14	0.0282	w/Dyed
5	6	1147	490	657	16	0.0327	14	0.0213	w/Dyed	21	0.0429	20	0.0304	w/Dyed
5	11	829	484	345	2	0.0041	4	0.0116	w/Control	5	0.0103	5	0.0145	w/Control
5	12	1202	100	1102	2	0.0200	8	0.0073	w/Dyed	4	0.0400	22	0.0200	w/Dyed
Tuna Sets:		4445	3175	1270	20	0.0063	5	0.0039		51	0.0159	13	0.0105	
Swordfish Sets:		10007	4632	5375	70	0.0218	88	0.0159		147	0.0366	176	0.0313	
All Sets:		14452	7807	6645	90	0.0203	93	0.0147	15 w/Dyed	198	0.0346	189	0.0293	14 w/Dyed
		sum	sum	sum	sum	ave	sum	ave	6 w/Control	sum	ave	sum	ave	7 w/Control

Purpose of this particular analysis: To determine if bait dying effects fish catch
Rationale behind the analysis: Compare catch using dyed bait to control catch
Method of this particular analysis: Assemble fish/hook (CPUE) table for dyed-bait vs control sets. Control periods were used in this analysis are only those that occurred on the SAME set that dyed baits were used. The total number of hooks of both dyed bait and control are presented.

Key to Abreviations used in Data Table:
abs = absolute number of fish caught (not corrected for variation in # hooks set).
Mar = all marketable fish (including targets) that were hooked.
Cont = control

Trip 1: Target Species: Bigeye Tuna; Bait: Samna; Mainline Shooter: yes.
Trips 2, 3, 4 and 5: Target Species: Broad-bill Swordfish; Bait: Squid; Mainline Shooter: No.

Filename: FinCPUE

Effect of Dyed Baits on Target and Marketable Fish Catch: Trips 1 through 5

Trip#	Set#	Total Hook #	# Dyed Hooks	# Cont Hooks	Dyed Target Catch (abs)	Dyed Target CPUE (fish/hook)	Cont Target Catch (abs)	Cont Target CPUE (fish/hook)	Greater CPUE?	Dyed Mar Catch (abs)	Dyed Mar CPUE (fish/hook)	Cont Mar Catch (abs)	Cont Mar CPUE (fish/hook)	Greater CPUE?
1	4	2265	1546	719	8	0.0052	3	0.0042	w/Dyed	15	0.0097	6	0.0083	w/Dyed
1	8	2180	1629	551	12	0.0074	2	0.0036	w/Dyed	36	0.0221	7	0.0127	w/Dyed
2	3	842	686	156	4	0.0058	1	0.0064	w/Control	20	0.0292	10	0.0641	w/Control
2	7	823	643	180	5	0.0078	0	0.0000	w/Dyed	7	0.0109	1	0.0056	w/Dyed
2	12	926	450	476	5	0.0111	1	0.0021	w/Dyed	8	0.0178	10	0.0210	w/Control
2	16	899	540	359	0	0.0000	1	0.0028	w/Control	1	0.0019	1	0.0028	w/Control
3	3	659	278	381	7	0.0252	11	0.0289	w/Control	9	0.0324	20	0.0525	w/Control
3	5	673	36	637	2	0.0556	12	0.0188	w/Dyed	2	0.0556	20	0.0314	w/Dyed
3	9	718	342	376	11	0.0322	16	0.0426	w/Control	22	0.0643	30	0.0798	w/Control
3	13	429	240	189	4	0.0167	0	0.0000	w/Dyed	6	0.0250	3	0.0159	w/Dyed
3	17	245	101	144	4	0.0396	4	0.0278	w/Dyed	6	0.0594	7	0.0486	w/Dyed
3	19	378	180	198	0	0.0000	9	0.0455	w/Control	0	0.0000	11	0.0556	w/Control
3	21	569	107	462	2	0.0187	7	0.0152	w/Dyed	4	0.0374	8	0.0173	w/Dyed
4	2	974	418	556	14	0.0335	16	0.0288	w/Dyed	26	0.0622	28	0.0504	w/Dyed
4	5	972	339	633	9	0.0265	7	0.0111	w/Dyed	28	0.0826	20	0.0316	w/Dyed
4	8	900	272	628	3	0.0110	3	0.0048	w/Dyed	8	0.0294	7	0.0111	w/Dyed
5	1	1037	428	609	7	0.0164	3	0.0049	w/Dyed	14	0.0327	8	0.0131	w/Dyed
5	5	726	228	496	13	0.0570	11	0.0222	w/Dyed	14	0.0614	14	0.0282	w/Dyed
5	6	1147	490	657	16	0.0327	14	0.0213	w/Dyed	21	0.0429	20	0.0304	w/Dyed
5	11	829	484	345	2	0.0041	4	0.0116	w/Control	5	0.0103	5	0.0145	w/Control
5	12	1202	100	1102	2	0.0200	8	0.0073	w/Dyed	4	0.0400	22	0.0200	w/Dyed
Tuna Sets:		**4445**	**3175**	**1270**	**20**	**0.0063**	**5**	**0.0039**		**51**	**0.0159**	**13**	**0.0105**	
Swordfish Sets:		**10007**	**4632**	**5375**	**70**	**0.0218**	**88**	**0.0159**		**147**	**0.0366**	**176**	**0.0313**	
All Sets:		**14452**	**7807**	**6645**	**90**	**0.0203**	**93**	**0.0147**	**15 w/Dyed**	**198**	**0.0346**	**189**	**0.0293**	**14 w/Dyed**
		sum	sum	sum	sum	ave	sum	ave	6 w/Control	sum	ave	sum	ave	7 w/Control

Purpose of this particular analysis: To determine if bait dying effects fish catch
Rationale behind the analysis: Compare catch using dyed bait to control catch
Method of this particular analysis: Assemble fish/hook (CPUE) table for dyed-bait vs control sets. Control periods were used in this analysis are only those that occurred on the SAME set that dyed baits were used. The total number of hooks of both dyed bait and control are presented.

Key to Abreviations used in Data Table:

abs = absolute number of fish caught (not corrected for variation in # hooks set).
Mar = all marketable fish (including targets) that were hooked.
Cont = control

Trip 1: Target Species: Bigeye Tuna; Bait: Samna; Mainline Shooter: yes.
Trips 2, 3, 4 and 5: Target Species: Broad-bill Swordfish; Bait: Squid; Mainline Shooter: No.

APPENDIX I: GLM DATA TABLES

Filename: Fstat1

Summary of F statistics generated from general linear mod
All treatements were found to produce statistically significant results with th
single exception of the Laysan albatross Attempt data from the sets.

Set or Haul	Event	Birds Considered	F Value	Pr (F)
Set	Attempts	All	4.131	0.0038
Set	Interactions	All	4.044	0.0043
Set	Attempts	BFA	3.390	0.0119
Set	Attempts	LA	0.321	0.8630
Set	Interactions	BFA	3.619	0.0084
Set	Interactions	LA	2.651	0.0391
Haul	Attempts	All	48.583	0.0000
Haul	Interactions	All	19.357	0.0000
Haul	Attempts	BFA	44.790	0.0000
Haul	Attempts	LA	12.647	0.0000
Haul	Interactions	BFA	17.058	0.0000
Haul	Interactions	LA	15.153	0.0000
Set	Mortality	All	10.603	0.0000
Set	Mortality	BFA	4.387E+28	0.0000
Set	Mortality	LA	2.676	0.0376