Monitoring of Chinese White Dolphins in Southwest Lantau Waters

10th Monthly Progress Report (December 2015)
submitted to Environmental Project Office for the HZMB HKLR, HZMB HKBCF and TM-CLKL – Investigation

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1. Introduction

1.1. In March 2015, Hong Kong Cetacean Research Project (HKCRP) was appointed by the Environmental Project Office for the HZMB Hong Kong Projects to undertake a monitoring study of Chinese White Dolphins in Southwest Lantau (SWL) waters.

1.2. The objectives of the monitoring study are to quantify the abundance and density of Chinese White Dolphins in SWL waters, to identify individuals during the monitoring surveys, and to analyze their range use and movement patterns in Hong Kong and the wider Pearl River Estuary waters.

1.3. The monitoring study will supplement the on-going EM&A monitoring results of the HZMB Hong Kong Projects in North and West Lantau waters, and provide a more complete picture of dolphin usage and movements between different survey areas in western Hong Kong waters.

1.4. The present report is the tenth monthly progress report under this dolphin monitoring study submitted to the Environmental Project Office, summarizing the survey findings during the month of December 2015.

2. Monitoring Methodology

2.1. Vessel-based Line-transect Survey

2.1.1. According to the requirement of the technical proposal submitted to the Environmental

Project Office, dolphin monitoring programme should cover all transect lines in SWL survey area (see Figure 1) once per month upon instruction. The co-ordinates of all transect lines conducted during the dolphin monitoring survey are shown in Table 1.

Table 1. Co-ordinates of transect lines in SWL survey area (corresponding to transect line layout as shown in Figure 1)

Line #		Northing	Easting		Line #		Northing	Easting
SWL001	1	806180	802510		SWL007	13	807380	808520
	2	804250	802510			14	805600	808520
SWL002	3	806710	803480			15	804400	808520
	4	803450	803480			16	803000	808520
SWL003	5	807270	804500			17	802100	808520
	6	802690	804500			18	800470	808520
SWL004	7	807590	805450		SWL008	19	807380	809550
	8	802295	805450			20	805050	809550
SWL005	9	808490	806500			21	804400	809550
	10	801410	806500			22	800470	809550
SWL006	11	808500	807430		SWL009	23	807380	810550
	12	801250	807430			24	800470	810550
					SWL010	25	809410	811510
						26	801470	811510

2.1.2. The HKCRP survey team used standard line-transect methods (Buckland et al. 2001) to conduct the systematic vessel surveys, and followed the same technique of data collection that has been adopted over the last 17 years of marine mammal monitoring surveys in Hong Kong developed by HKCRP (see Hung 2014). For each monitoring vessel survey, a 15-m inboard vessel with an open upper deck (about 4.5 m above water surface) was used to make observations from the flying bridge area.

2.1.3. Two experienced observers from HKCRP (a data recorder and a primary observer) made up the on-effort survey team, and the survey vessel transited different transect lines at a

constant speed of 13-15 km per hour. The data recorder searched with unaided eyes and filled out the datasheets, while the primary observer searched for dolphins and porpoises continuously through 7 x 50 *Fujinon* marine binoculars. Both observers searched the sea ahead of the vessel, between 270^{o} and 90^{o} (in relation to the bow, which is defined as 0^{o}). One to two additional experienced observer was available on the boat to work in shift (i.e. rotate every 30 minutes) in order to minimize fatigue of the survey team members. All observers were experienced in small cetacean survey techniques and identifying local cetacean species.

2.1.4. During on-effort survey periods, the survey team recorded effort data including time, position (latitude and longitude), weather conditions (Beaufort sea state and visibility), and distance traveled in each series (a continuous period of search effort) with the assistance of a handheld GPS (*Garmin eTrex Legend*).

2.1.5. Data including time, position and vessel speed were also automatically and continuously logged by handheld GPS throughout the entire survey for subsequent review.

2.1.6. When dolphins were sighted, the survey team would end the survey effort, and immediately record the initial sighting distance and angle of the dolphin group from the survey vessel, as well as the sighting time and position. Then the research vessel was diverted from its course to approach the animals for species identification, group size estimation, assessment of group composition, and behavioural observations. The perpendicular distance (PSD) of the dolphin group to the transect line was later calculated from the initial sighting distance and angle.

2.1.7. Survey effort being conducted along the parallel transect lines that were perpendicular to the coastlines (as indicated in Figure 1) was labeled as “primary” survey effort, while the survey effort conducted along the connecting lines between parallel lines as well as the section around the Soko Islands was labeled as “secondary” survey effort. Both primary and secondary survey effort were presented as on-effort survey effort in this report.

2.1.8. Encounter rates of Chinese White Dolphins (number of on-effort sightings per 100 km of survey effort and number of dolphins from all on-effort sightings per 100 km of survey effort) were calculated in SWL survey area in relation to the amount of survey effort conducted during each month of monitoring survey. Only data collected under Beaufort 3 or below condition would be used for encounter rate analysis. Dolphin encounter rates were calculated using the combined survey effort from both primary and secondary lines for comparison to the historical data collected by HKCRP in this survey area. For the historical data, the encounter rates were calculated by pooling all relevant survey effort

and dolphin sightings to calculate a single index.

2.2. Photo-identification Work

2.2.1. When a group of Chinese White Dolphins were sighted during the line-transect survey, the survey team would end effort and approach the group slowly from the side and behind to take photographs of them. Every attempt was made to photograph every dolphin in the group, and even photograph both sides of the dolphins, since the colouration and markings on both sides may not be symmetrical.

2.2.2. A professional digital camera (*Canon* EOS 7D model), equipped with long telephoto lenses (100-400 mm zoom), were available on board for researchers to take sharp, close-up photographs of dolphins as they surfaced. The images were shot at the highest available resolution and stored on Compact Flash memory cards for downloading onto a computer.

2.2.3. All digital images taken in the field were first examined, and those containing potentially identifiable individuals were sorted out. These photographs would then be examined in greater detail, and were carefully compared to the existing Chinese White Dolphin photo-identification catalogue maintained by HKCRP since 1995. For individual dolphins that are not readily identifiable from the catalogue but have distinct features on their bodies, they will be placed in a pool of "potential new individuals", with decision being made at the end of each year on whether any of them should be incorporated into the photo-ID catalogue.

2.2.4. Chinese White Dolphins can be identified by their natural markings, such as nicks, cuts, scars and deformities on their dorsal fin and body, and their unique spotting patterns were also used as secondary identifying features (Jefferson 2000).

2.2.5. All photographs of each individual were then compiled and arranged in chronological order, with data including the date and location first identified (initial sighting), re-sightings, associated dolphins, distinctive features, and age classes entered into a computer database.

3. Monitoring Results

3.1. Vessel-based Line-transect Survey

3.1.1. One set of systematic line-transect vessel survey was conducted under the present

monitoring study on December 14th, 2015, to cover all transect lines in SWL survey area once (the survey route and track log are presented in Figure 2 and Appendix I respectively).

3.1.2. In addition, three line-transect surveys were also conducted under the AFCD long-term marine mammal monitoring programme in SWL survey area on December 3rd (with lines no. SWL002, SWL004, SWL006 and SWL008 covered), December 18th (with lines no. SWL003, SWL005, SWL007 and SWL009 covered) and December 30th (with lines no. SWL004, SWL006, SWL008 and SWL010 covered). Such monitoring data were also incorporated into the present study for various analyses.

3.1.3. For the present study alone, a total of 71.00 km of survey effort was collected from 11:06 to 16:50 (i.e. 5 hours and 44 minutes of survey time) on December 14th, with 95% of the total survey effort being conducted under favourable weather conditions (i.e. Beaufort Sea State 3 or below with good visibility) (Appendix II). The total survey effort conducted on primary and secondary lines were 55.31 km and 15.69 km respectively.

3.1.4. For the combined monitoring dataset from both the present study and AFCD monitoring study, a total of 162.53 km of survey effort was collected SWL waters in December 2015.

3.1.5. During this month, seven groups of 24 Chinese White Dolphins were sighted from the present study's survey and two of the three AFCD monitoring surveys conducted in SWL survey area (Appendix III). All seven dolphin groups were sighted during on-effort search, and six of the seven on-effort sightings were made on primary lines. One of these dolphin groups was associated with an operating purse-seiner.

3.1.6. Notably, five groups of 17 finless porpoises were also sighted during this monitoring month.

3.1.7. Distribution of dolphin sightings made in December 2015 is shown in Figure 3. These dolphin groups were evenly spread with no particular concentration, with some sighted near Fan Lau and to the south of Shek Pik, while a few animals also occurred near Siu A Chau and at the offshore waters to the west of Soko Islands (Figure 3).

3.1.8. Encounter rates of Chinese White Dolphins deduced from the survey effort and on-effort sighting data made under favourable conditions (Beaufort 3 or below) in December 2015 are shown in Table 2. Comparison of encounter rates was also made to the one deduced in winter months (December-February) in the past decade (2005-14) (Table 2).

Table 2. Overall dolphin encounter rates (sightings per 100 km of survey effort) from the present monitoring survey and combined database with AFCD monitoring survey conducted in December 2015 (primary lines only, as well as both primary lines and secondary lines were used) in SWL survey area in comparison to the ones deduced during winter months (December-February 2005-14) in the past decade

	Encounter rate (STG) (no. of on-effort dolphin sightings per 100 km of survey effort)		**Encounter rate (ANI)** (no. of dolphins from all on-effort sightings per 100 km of survey effort)	
	Primary Lines Only	Both Primary and Secondary Lines	Primary Lines Only	Both Primary and Secondary Lines
HYD-HZMB data (December 2015)	3.80	2.96	7.61	5.91
Combined data (December 2015)	5.29	4.40	20.28	15.08
Historical Data (Winter 2005-14)		3.32		10.88

3.1.9. From the combined data of HYD-HZMB and AFCD monitoring surveys, the overall encounter rates based on the number of dolphin sightings (ER(STG)) and the total number of dolphins (ER(ANI)) deduced in December 2015 in SWL waters were both higher than the ones deduced from the historical data during the winter months of 2004-15 (Table 2).

3.1.10. The average group size of Chinese White Dolphins in December 2015 was 3.4 animals per group, which was similar to the average group size in winter months of 2005-14 (3.3). Most groups were very small with only 1-2 animals per group, but there was a moderately large group of eight animals sighted near Fan Lau.

3.2. Photo-identification Work

3.2.1. Attempts were made to photograph the dolphins sighted during all surveys conducted in December 2015.

3.2.2. Among the 24 dolphins sighted during this month's surveys, 12 individual dolphins were identified and re-sighted 12 times in total (Appendices IV and V). One of these individuals (WL129) was accompanied by her young calf.

3.2.3. The locations where most individuals being re-sighted were well within their past home ranges in SWL and WL waters. However, one individual (NL120) was primarily sighted in North Lantau waters in the past, but has shown up in SWL survey area during this month's surveys. In fact, this individual has consistently occurred in SWL and WL survey areas for a number of times without any appearance in North Lantau waters in 2015, apparently shifting its range to these areas recently.

4. References

Buckland, S. T., Anderson, D. R., Burnham, K. P., Laake, J. L., Borchers, D. L., and Thomas, L. 2001. Introduction to distance sampling: estimating abundance of biological populations. Oxford University Press, London.

Hung, S. K. 2014. Monitoring of Marine Mammals in Hong Kong waters: final report (2013-14). An unpublished report submitted to the Agriculture, Fisheries and Conservation Department, 231 pp.

Jefferson, T. A. 2000. Population biology of the Indo-Pacific hump-backed dolphin in Hong Kong waters. Wildlife Monographs 144:1-65.

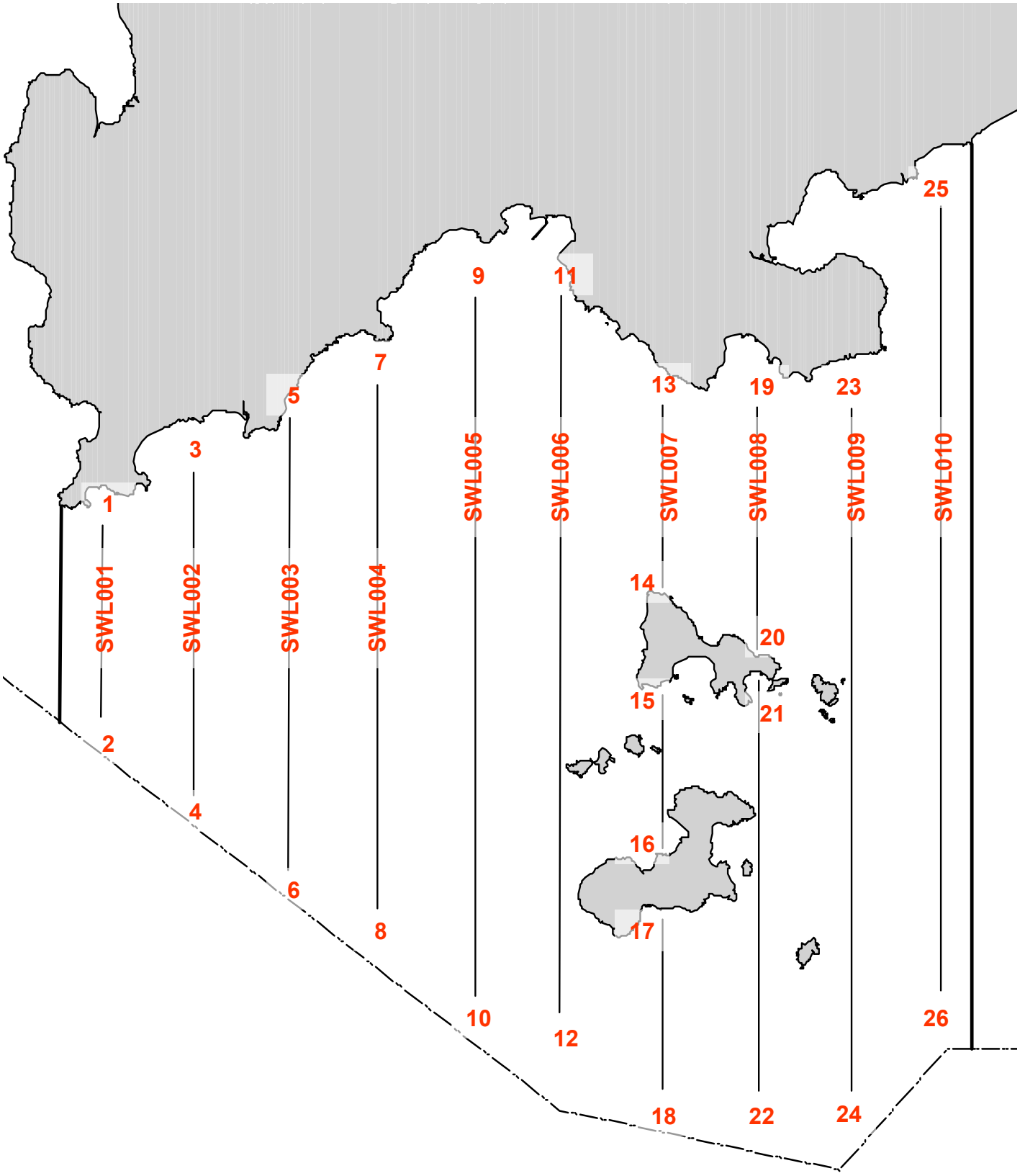

Figure 1. Survey Lines and associated coordinates in Southwest Lantau survey area

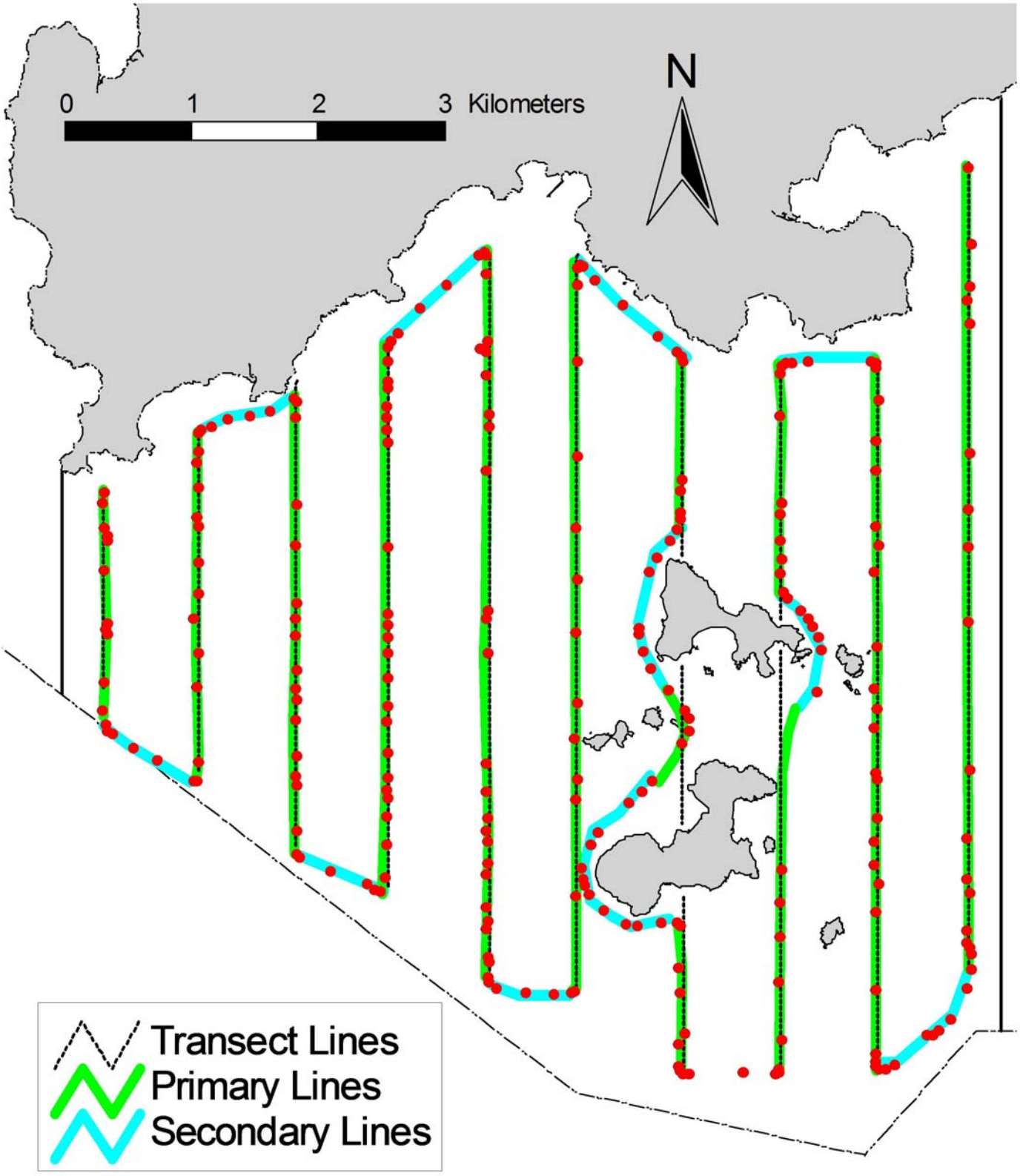

Figure 2. Survey Route on December 14th, 2015 (note: red dots represent the tracked positions of survey boat logged continuously by GPS throughout the course of the survey)

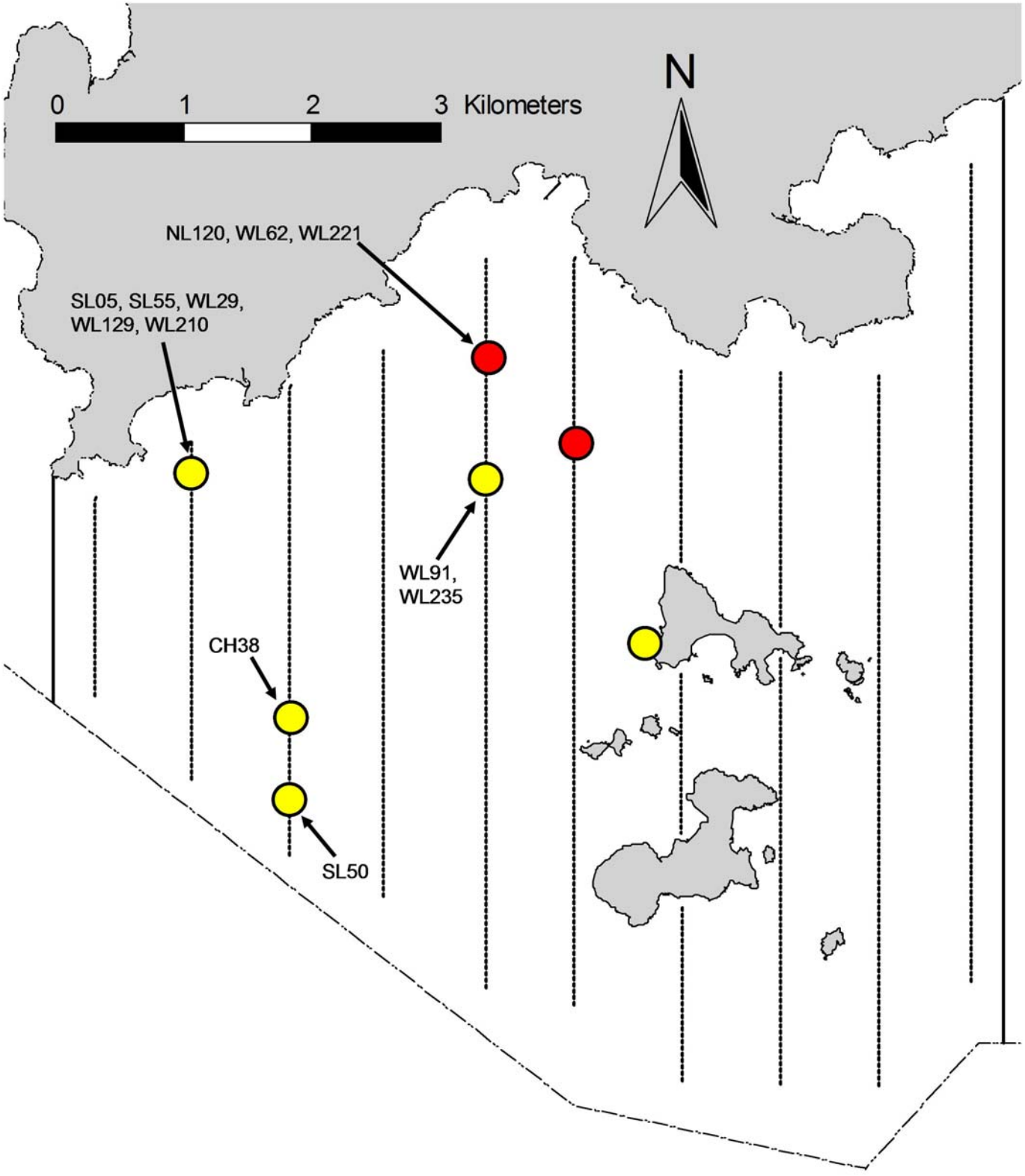

Figure 3. Distribution of Chinese White Dolphin sightings during December 2015 monitoring surveys in Southwest Lantau survey area, with identified individuals indicated for their corresponding sightings (red dot: HYD-HZMB sighting; yellow dot: AFCD sighting)

Appendix I. Track Log of Southwest Lantau Survey on Dec. 14th, 2015

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 11:06	ON	N22.19395 E113.84912			
14/12/2015 11:06	ON	N22.19380 E113.84942	35 m	0:00:13	10 kph
14/12/2015 11:06	ON	N22.19369 E113.84944	12 m	0:00:04	11 kph
14/12/2015 11:07	ON	N22.19340 E113.84939	33 m	0:00:09	13 kph
14/12/2015 11:07	ON	N22.19308 E113.84931	36 m	0:00:09	14 kph
14/12/2015 11:07	ON	N22.19265 E113.84926	49 m	0:00:12	15 kph
14/12/2015 11:07	ON	N22.19228 E113.84932	41 m	0:00:11	14 kph
14/12/2015 11:07	ON	N22.19181 E113.84942	54 m	0:00:14	14 kph
14/12/2015 11:07	ON	N22.19139 E113.84946	47 m	0:00:12	14 kph
14/12/2015 11:08	ON	N22.19100 E113.84943	43 m	0:00:11	14 kph
14/12/2015 11:08	ON	N22.19056 E113.84945	49 m	0:00:13	14 kph
14/12/2015 11:08	ON	N22.19021 E113.84957	41 m	0:00:11	13 kph
14/12/2015 11:08	ON	N22.18976 E113.84969	52 m	0:00:14	13 kph
14/12/2015 11:09	ON	N22.18935 E113.84971	46 m	0:00:13	13 kph
14/12/2015 11:09	ON	N22.18886 E113.84967	55 m	0:00:15	13 kph
14/12/2015 11:09	ON	N22.18836 E113.84968	55 m	0:00:15	13 kph
14/12/2015 11:09	ON	N22.18777 E113.84964	66 m	0:00:18	13 kph
14/12/2015 11:10	ON	N22.18730 E113.84965	52 m	0:00:14	13 kph
14/12/2015 11:10	ON	N22.18679 E113.84954	58 m	0:00:16	13 kph
14/12/2015 11:10	ON	N22.18638 E113.84962	46 m	0:00:13	13 kph
14/12/2015 11:10	ON	N22.18578 E113.84965	68 m	0:00:18	14 kph
14/12/2015 11:11	ON	N22.18526 E113.84951	60 m	0:00:16	13 kph
14/12/2015 11:11	ON	N22.18480 E113.84952	50 m	0:00:14	13 kph
14/12/2015 11:11	ON	N22.18417 E113.84967	73 m	0:00:19	14 kph
14/12/2015 11:11	ON	N22.18373 E113.84967	49 m	0:00:13	14 kph
14/12/2015 11:12	ON	N22.18326 E113.84960	53 m	0:00:14	14 kph
14/12/2015 11:12	ON	N22.18275 E113.84964	57 m	0:00:15	14 kph
14/12/2015 11:12	ON	N22.18212 E113.84971	70 m	0:00:19	13 kph
14/12/2015 11:12	ON	N22.18162 E113.84958	57 m	0:00:15	14 kph
14/12/2015 11:13	ON	N22.18109 E113.84966	60 m	0:00:16	13 kph
14/12/2015 11:13	ON	N22.18055 E113.84970	61 m	0:00:16	14 kph
14/12/2015 11:13	ON	N22.17997 E113.84962	64 m	0:00:17	14 kph
14/12/2015 11:14	ON	N22.17943 E113.84955	61 m	0:00:16	14 kph
14/12/2015 11:14	ON	N22.17896 E113.84955	52 m	0:00:14	13 kph
14/12/2015 11:14	ON	N22.17835 E113.84949	69 m	0:00:18	14 kph
14/12/2015 11:14	ON	N22.17790 E113.84946	50 m	0:00:13	14 kph
14/12/2015 11:14	ON	N22.17742 E113.84949	53 m	0:00:14	14 kph
14/12/2015 11:15	ON	N22.17691 E113.84952	58 m	0:00:15	14 kph
14/12/2015 11:15	ON	N22.17637 E113.84946	60 m	0:00:16	13 kph
14/12/2015 11:15	ON	N22.17592 E113.84941	51 m	0:00:13	14 kph
14/12/2015 11:15	ON	N22.17541 E113.84945	57 m	0:00:15	14 kph
14/12/2015 11:16	ON	N22.17486 E113.84942	61 m	0:00:16	14 kph
14/12/2015 11:16	ON	N22.17426 E113.84944	67 m	0:00:18	13 kph
14/12/2015 11:16	ON	N22.17371 E113.84952	62 m	0:00:16	14 kph
14/12/2015 11:17	ON	N22.17305 E113.84958	73 m	0:00:19	14 kph
14/12/2015 11:17	ON	N22.17264 E113.84980	51 m	0:00:14	13 kph
14/12/2015 11:17	ON	N22.17232 E113.85041	72 m	0:00:19	14 kph
14/12/2015 11:17	ON	N22.17206 E113.85089	57 m	0:00:15	14 kph
14/12/2015 11:18	ON	N22.17179 E113.85137	59 m	0:00:15	14 kph
14/12/2015 11:18	ON	N22.17143 E113.85192	70 m	0:00:18	14 kph
14/12/2015 11:18	ON	N22.17106 E113.85248	70 m	0:00:18	14 kph
14/12/2015 11:19	ON	N22.17075 E113.85311	74 m	0:00:19	14 kph
14/12/2015 11:19	ON	N22.17046 E113.85377	75 m	0:00:19	14 kph
14/12/2015 11:19	ON	N22.17021 E113.85441	72 m	0:00:18	14 kph
14/12/2015 11:19	ON	N22.16997 E113.85494	61 m	0:00:16	14 kph
14/12/2015 11:20	ON	N22.16967 E113.85556	72 m	0:00:18	14 kph
14/12/2015 11:20	ON	N22.16934 E113.85623	79 m	0:00:20	14 kph
14/12/2015 11:20	ON	N22.16902 E113.85688	75 m	0:00:19	14 kph
14/12/2015 11:21	ON	N22.16873 E113.85745	67 m	0:00:17	14 kph
14/12/2015 11:21	ON	N22.16834 E113.85814	84 m	0:00:21	14 kph
14/12/2015 11:21	ON	N22.16810 E113.85860	54 m	0:00:14	14 kph
14/12/2015 11:21	ON	N22.16823 E113.85888	32 m	0:00:11	11 kph
14/12/2015 11:22	ON	N22.16854 E113.85895	34 m	0:00:12	10 kph
14/12/2015 11:22	ON	N22.16893 E113.85894	43 m	0:00:13	12 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 11:22	ON	N22.16933 E113.85898	45 m	0:00:13	12 kph
14/12/2015 11:22	ON	N22.16977 E113.85900	49 m	0:00:14	13 kph
14/12/2015 11:23	ON	N22.17021 E113.85895	49 m	0:00:14	13 kph
14/12/2015 11:23	ON	N22.17066 E113.85894	50 m	0:00:14	13 kph
14/12/2015 11:23	ON	N22.17111 E113.85891	51 m	0:00:14	13 kph
14/12/2015 11:23	ON	N22.17159 E113.85887	53 m	0:00:15	13 kph
14/12/2015 11:23	ON	N22.17191 E113.85887	36 m	0:00:10	13 kph
14/12/2015 11:24	ON	N22.17233 E113.85889	46 m	0:00:13	13 kph
14/12/2015 11:24	ON	N22.17272 E113.85888	44 m	0:00:13	12 kph
14/12/2015 11:24	ON	N22.17310 E113.85886	42 m	0:00:12	13 kph
14/12/2015 11:24	ON	N22.17355 E113.85887	50 m	0:00:14	13 kph
14/12/2015 11:25	ON	N22.17403 E113.85886	53 m	0:00:15	13 kph
14/12/2015 11:25	ON	N22.17447 E113.85882	49 m	0:00:14	13 kph
14/12/2015 11:25	ON	N22.17485 E113.85881	43 m	0:00:12	13 kph
14/12/2015 11:25	ON	N22.17527 E113.85884	48 m	0:00:13	13 kph
14/12/2015 11:25	ON	N22.17573 E113.85887	51 m	0:00:14	13 kph
14/12/2015 11:26	ON	N22.17611 E113.85887	42 m	0:00:12	13 kph
14/12/2015 11:26	ON	N22.17652 E113.85881	46 m	0:00:13	13 kph
14/12/2015 11:26	ON	N22.17684 E113.85879	35 m	0:00:10	13 kph
14/12/2015 11:26	ON	N22.17725 E113.85880	46 m	0:00:13	13 kph
14/12/2015 11:26	ON	N22.17760 E113.85882	39 m	0:00:11	13 kph
14/12/2015 11:27	ON	N22.17802 E113.85883	47 m	0:00:13	13 kph
14/12/2015 11:27	ON	N22.17842 E113.85884	44 m	0:00:12	13 kph
14/12/2015 11:27	ON	N22.17899 E113.85886	63 m	0:00:17	13 kph
14/12/2015 11:27	ON	N22.17949 E113.85885	56 m	0:00:15	13 kph
14/12/2015 11:28	ON	N22.18003 E113.85881	60 m	0:00:16	14 kph
14/12/2015 11:28	ON	N22.18054 E113.85881	57 m	0:00:15	14 kph
14/12/2015 11:28	ON	N22.18096 E113.85876	48 m	0:00:13	13 kph
14/12/2015 11:28	ON	N22.18129 E113.85879	36 m	0:00:10	13 kph
14/12/2015 11:29	ON	N22.18168 E113.85876	44 m	0:00:13	12 kph
14/12/2015 11:29	ON	N22.18205 E113.85865	43 m	0:00:12	13 kph
14/12/2015 11:29	ON	N22.18253 E113.85863	54 m	0:00:15	13 kph
14/12/2015 11:29	ON	N22.18295 E113.85866	47 m	0:00:13	13 kph
14/12/2015 11:29	ON	N22.18337 E113.85870	47 m	0:00:13	13 kph
14/12/2015 11:30	ON	N22.18388 E113.85877	57 m	0:00:16	13 kph
14/12/2015 11:30	ON	N22.18429 E113.85883	46 m	0:00:13	13 kph
14/12/2015 11:30	ON	N22.18470 E113.85887	46 m	0:00:13	13 kph
14/12/2015 11:30	ON	N22.18505 E113.85886	39 m	0:00:11	13 kph
14/12/2015 11:30	ON	N22.18537 E113.85886	36 m	0:00:10	13 kph
14/12/2015 11:31	ON	N22.18576 E113.85888	43 m	0:00:12	13 kph
14/12/2015 11:31	ON	N22.18624 E113.85888	54 m	0:00:15	13 kph
14/12/2015 11:31	ON	N22.18659 E113.85888	39 m	0:00:11	13 kph
14/12/2015 11:31	ON	N22.18700 E113.85891	46 m	0:00:13	13 kph
14/12/2015 11:32	ON	N22.18747 E113.85894	53 m	0:00:15	13 kph
14/12/2015 11:32	ON	N22.18766 E113.85894	21 m	0:00:06	13 kph
14/12/2015 11:32	ON	N22.18808 E113.85891	47 m	0:00:13	13 kph
14/12/2015 11:32	ON	N22.18847 E113.85886	43 m	0:00:12	13 kph
14/12/2015 11:32	ON	N22.18899 E113.85884	58 m	0:00:16	13 kph
14/12/2015 11:33	ON	N22.18957 E113.85889	64 m	0:00:18	13 kph
14/12/2015 11:33	ON	N22.19008 E113.85892	57 m	0:00:16	13 kph
14/12/2015 11:33	ON	N22.19068 E113.85893	68 m	0:00:19	13 kph
14/12/2015 11:33	ON	N22.19108 E113.85886	45 m	0:00:13	12 kph
14/12/2015 11:34	ON	N22.19149 E113.85878	46 m	0:00:13	13 kph
14/12/2015 11:34	ON	N22.19202 E113.85885	59 m	0:00:17	13 kph
14/12/2015 11:34	ON	N22.19252 E113.85890	56 m	0:00:16	13 kph
14/12/2015 11:35	ON	N22.19312 E113.85889	67 m	0:00:19	13 kph
14/12/2015 11:35	ON	N22.19357 E113.85897	51 m	0:00:15	12 kph
14/12/2015 11:35	ON	N22.19416 E113.85904	65 m	0:00:19	12 kph
14/12/2015 11:35	ON	N22.19460 E113.85901	49 m	0:00:14	13 kph
14/12/2015 11:36	ON	N22.19515 E113.85900	62 m	0:00:18	12 kph
14/12/2015 11:36	ON	N22.19558 E113.85895	48 m	0:00:14	12 kph
14/12/2015 11:36	ON	N22.19594 E113.85888	41 m	0:00:12	12 kph
14/12/2015 11:36	ON	N22.19643 E113.85884	54 m	0:00:16	12 kph
14/12/2015 11:37	ON	N22.19698 E113.85886	61 m	0:00:18	12 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 11:37	ON	N22.19742 E113.85892	49 m	0:00:14	13 kph
14/12/2015 11:37	ON	N22.19791 E113.85896	55 m	0:00:16	12 kph
14/12/2015 11:37	ON	N22.19847 E113.85897	63 m	0:00:18	13 kph
14/12/2015 11:38	ON	N22.19895 E113.85898	52 m	0:00:15	13 kph
14/12/2015 11:38	ON	N22.19931 E113.85924	49 m	0:00:15	12 kph
14/12/2015 11:38	ON	N22.19943 E113.85965	44 m	0:00:13	12 kph
14/12/2015 11:38	ON	N22.19962 E113.86022	63 m	0:00:18	13 kph
14/12/2015 11:39	ON	N22.19984 E113.86076	61 m	0:00:17	13 kph
14/12/2015 11:39	ON	N22.19998 E113.86118	46 m	0:00:13	13 kph
14/12/2015 11:39	ON	N22.20010 E113.86159	44 m	0:00:12	13 kph
14/12/2015 11:39	ON	N22.20020 E113.86188	32 m	0:00:09	13 kph
14/12/2015 11:40	ON	N22.20030 E113.86236	50 m	0:00:14	13 kph
14/12/2015 11:40	ON	N22.20036 E113.86288	55 m	0:00:15	13 kph
14/12/2015 11:40	ON	N22.20043 E113.86366	80 m	0:00:22	13 kph
14/12/2015 11:40	ON	N22.20051 E113.86419	56 m	0:00:15	13 kph
14/12/2015 11:41	ON	N22.20063 E113.86475	59 m	0:00:16	13 kph
14/12/2015 11:41	ON	N22.20071 E113.86529	56 m	0:00:15	13 kph
14/12/2015 11:41	ON	N22.20080 E113.86574	48 m	0:00:13	13 kph
14/12/2015 11:41	ON	N22.20092 E113.86621	50 m	0:00:14	13 kph
14/12/2015 11:42	ON	N22.20112 E113.86666	51 m	0:00:15	12 kph
14/12/2015 11:42	ON	N22.20136 E113.86704	47 m	0:00:14	12 kph
14/12/2015 11:42	ON	N22.20148 E113.86734	34 m	0:00:10	12 kph
14/12/2015 11:42	ON	N22.20167 E113.86778	50 m	0:00:15	12 kph
14/12/2015 11:43	ON	N22.20192 E113.86822	53 m	0:00:16	12 kph
14/12/2015 11:43	ON	N22.20209 E113.86862	46 m	0:00:14	12 kph
14/12/2015 11:43	ON	N22.20184 E113.86888	38 m	0:00:13	11 kph
14/12/2015 11:43	ON	N22.20138 E113.86879	52 m	0:00:14	13 kph
14/12/2015 11:43	ON	N22.20091 E113.86874	53 m	0:00:13	15 kph
14/12/2015 11:44	ON	N22.20035 E113.86869	62 m	0:00:15	15 kph
14/12/2015 11:44	ON	N22.19987 E113.86870	54 m	0:00:13	15 kph
14/12/2015 11:44	ON	N22.19944 E113.86876	48 m	0:00:12	14 kph
14/12/2015 11:44	ON	N22.19889 E113.86874	62 m	0:00:15	15 kph
14/12/2015 11:45	ON	N22.19845 E113.86873	49 m	0:00:12	15 kph
14/12/2015 11:45	ON	N22.19795 E113.86877	56 m	0:00:14	14 kph
14/12/2015 11:45	ON	N22.19744 E113.86879	56 m	0:00:14	15 kph
14/12/2015 11:45	ON	N22.19683 E113.86877	68 m	0:00:17	14 kph
14/12/2015 11:46	ON	N22.19632 E113.86878	57 m	0:00:14	15 kph
14/12/2015 11:46	ON	N22.19570 E113.86879	69 m	0:00:17	15 kph
14/12/2015 11:46	ON	N22.19512 E113.86877	64 m	0:00:16	15 kph
14/12/2015 11:46	ON	N22.19465 E113.86879	52 m	0:00:13	15 kph
14/12/2015 11:47	ON	N22.19408 E113.86885	64 m	0:00:16	14 kph
14/12/2015 11:47	ON	N22.19337 E113.86888	79 m	0:00:20	14 kph
14/12/2015 11:47	ON	N22.19273 E113.86890	72 m	0:00:18	14 kph
14/12/2015 11:47	ON	N22.19222 E113.86888	56 m	0:00:14	14 kph
14/12/2015 11:48	ON	N22.19172 E113.86883	56 m	0:00:14	14 kph
14/12/2015 11:48	ON	N22.19115 E113.86881	64 m	0:00:16	14 kph
14/12/2015 11:48	ON	N22.19058 E113.86881	63 m	0:00:16	14 kph
14/12/2015 11:48	ON	N22.19012 E113.86883	51 m	0:00:13	14 kph
14/12/2015 11:49	ON	N22.18969 E113.86885	47 m	0:00:12	14 kph
14/12/2015 11:49	ON	N22.18909 E113.86880	68 m	0:00:17	14 kph
14/12/2015 11:49	ON	N22.18856 E113.86884	59 m	0:00:15	14 kph
14/12/2015 11:49	ON	N22.18804 E113.86890	58 m	0:00:15	14 kph
14/12/2015 11:50	ON	N22.18737 E113.86892	74 m	0:00:19	14 kph
14/12/2015 11:50	ON	N22.18680 E113.86891	63 m	0:00:16	14 kph
14/12/2015 11:50	ON	N22.18642 E113.86891	43 m	0:00:11	14 kph
14/12/2015 11:50	ON	N22.18596 E113.86892	51 m	0:00:13	14 kph
14/12/2015 11:51	ON	N22.18550 E113.86890	51 m	0:00:13	14 kph
14/12/2015 11:51	ON	N22.18498 E113.86891	59 m	0:00:15	14 kph
14/12/2015 11:51	ON	N22.18450 E113.86898	54 m	0:00:14	14 kph
14/12/2015 11:51	ON	N22.18401 E113.86901	54 m	0:00:14	14 kph
14/12/2015 11:52	ON	N22.18342 E113.86894	67 m	0:00:17	14 kph
14/12/2015 11:52	ON	N22.18300 E113.86887	47 m	0:00:12	14 kph
14/12/2015 11:52	ON	N22.18248 E113.86881	59 m	0:00:15	14 kph
14/12/2015 11:52	ON	N22.18192 E113.86881	62 m	0:00:16	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 11:53	ON	N22.18141 E113.86883	57 m	0:00:15	14 kph
14/12/2015 11:53	ON	N22.18099 E113.86882	46 m	0:00:12	14 kph
14/12/2015 11:53	ON	N22.18055 E113.86882	50 m	0:00:13	14 kph
14/12/2015 11:53	ON	N22.18003 E113.86884	58 m	0:00:15	14 kph
14/12/2015 11:53	ON	N22.17955 E113.86883	53 m	0:00:14	14 kph
14/12/2015 11:54	ON	N22.17900 E113.86882	62 m	0:00:16	14 kph
14/12/2015 11:54	ON	N22.17849 E113.86887	57 m	0:00:15	14 kph
14/12/2015 11:54	ON	N22.17798 E113.86892	57 m	0:00:15	14 kph
14/12/2015 11:54	ON	N22.17738 E113.86889	67 m	0:00:17	14 kph
14/12/2015 11:55	ON	N22.17683 E113.86882	62 m	0:00:16	14 kph
14/12/2015 11:55	ON	N22.17639 E113.86881	50 m	0:00:13	14 kph
14/12/2015 11:55	ON	N22.17586 E113.86892	60 m	0:00:16	13 kph
14/12/2015 11:56	ON	N22.17532 E113.86897	60 m	0:00:16	14 kph
14/12/2015 11:56	ON	N22.17485 E113.86894	52 m	0:00:14	13 kph
14/12/2015 11:56	ON	N22.17434 E113.86891	57 m	0:00:15	14 kph
14/12/2015 11:56	ON	N22.17394 E113.86888	45 m	0:00:12	14 kph
14/12/2015 11:56	ON	N22.17347 E113.86883	52 m	0:00:14	13 kph
14/12/2015 11:57	ON	N22.17290 E113.86887	63 m	0:00:17	13 kph
14/12/2015 11:57	ON	N22.17248 E113.86889	47 m	0:00:13	13 kph
14/12/2015 11:57	ON	N22.17200 E113.86886	54 m	0:00:15	13 kph
14/12/2015 11:57	ON	N22.17141 E113.86885	66 m	0:00:18	13 kph
14/12/2015 11:58	ON	N22.17083 E113.86886	64 m	0:00:18	13 kph
14/12/2015 11:58	ON	N22.17035 E113.86889	54 m	0:00:15	13 kph
14/12/2015 11:58	ON	N22.16990 E113.86895	51 m	0:00:14	13 kph
14/12/2015 11:58	ON	N22.16947 E113.86889	47 m	0:00:13	13 kph
14/12/2015 11:59	ON	N22.16895 E113.86878	59 m	0:00:16	13 kph
14/12/2015 11:59	ON	N22.16863 E113.86877	36 m	0:00:10	13 kph
14/12/2015 11:59	ON	N22.16819 E113.86887	50 m	0:00:14	13 kph
14/12/2015 11:59	ON	N22.16775 E113.86900	51 m	0:00:14	13 kph
14/12/2015 12:00	ON	N22.16722 E113.86898	58 m	0:00:16	13 kph
14/12/2015 12:00	ON	N22.16667 E113.86894	62 m	0:00:17	13 kph
14/12/2015 12:00	ON	N22.16618 E113.86894	55 m	0:00:15	13 kph
14/12/2015 12:00	ON	N22.16575 E113.86892	48 m	0:00:13	13 kph
14/12/2015 12:01	ON	N22.16529 E113.86889	51 m	0:00:14	13 kph
14/12/2015 12:01	ON	N22.16482 E113.86894	53 m	0:00:14	14 kph
14/12/2015 12:01	ON	N22.16434 E113.86896	54 m	0:00:14	14 kph
14/12/2015 12:01	ON	N22.16373 E113.86885	69 m	0:00:18	14 kph
14/12/2015 12:02	ON	N22.16331 E113.86881	46 m	0:00:12	14 kph
14/12/2015 12:02	ON	N22.16282 E113.86887	55 m	0:00:14	14 kph
14/12/2015 12:02	ON	N22.16221 E113.86891	68 m	0:00:17	14 kph
14/12/2015 12:02	ON	N22.16173 E113.86900	54 m	0:00:14	14 kph
14/12/2015 12:03	ON	N22.16143 E113.86932	47 m	0:00:13	13 kph
14/12/2015 12:03	ON	N22.16119 E113.86986	62 m	0:00:16	14 kph
14/12/2015 12:03	ON	N22.16095 E113.87045	66 m	0:00:17	14 kph
14/12/2015 12:03	ON	N22.16077 E113.87094	54 m	0:00:14	14 kph
14/12/2015 12:04	ON	N22.16055 E113.87139	52 m	0:00:13	14 kph
14/12/2015 12:04	ON	N22.16028 E113.87196	66 m	0:00:17	14 kph
14/12/2015 12:04	ON	N22.16014 E113.87235	44 m	0:00:12	13 kph
14/12/2015 12:04	ON	N22.15997 E113.87292	62 m	0:00:17	13 kph
14/12/2015 12:05	ON	N22.15982 E113.87340	52 m	0:00:14	13 kph
14/12/2015 12:05	ON	N22.15965 E113.87390	55 m	0:00:15	13 kph
14/12/2015 12:05	ON	N22.15946 E113.87451	67 m	0:00:18	13 kph
14/12/2015 12:05	ON	N22.15930 E113.87501	55 m	0:00:15	13 kph
14/12/2015 12:06	ON	N22.15913 E113.87556	59 m	0:00:16	13 kph
14/12/2015 12:06	ON	N22.15898 E113.87605	54 m	0:00:14	14 kph
14/12/2015 12:06	ON	N22.15878 E113.87650	51 m	0:00:15	12 kph
14/12/2015 12:06	ON	N22.15852 E113.87685	46 m	0:00:12	14 kph
14/12/2015 12:07	ON	N22.15828 E113.87720	45 m	0:00:13	13 kph
14/12/2015 12:07	ON	N22.15825 E113.87726	7 m	0:00:02	12 kph
14/12/2015 12:07	ON	N22.15825 E113.87743	17 m	0:00:06	10 kph
14/12/2015 12:07	ON	N22.15834 E113.87755	15 m	0:00:06	9 kph
14/12/2015 12:07	ON	N22.15876 E113.87765	48 m	0:00:15	12 kph
14/12/2015 12:07	ON	N22.15914 E113.87771	43 m	0:00:12	13 kph
14/12/2015 12:07	ON	N22.15960 E113.87794	56 m	0:00:15	13 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 12:08	ON	N22.16001 E113.87800	46 m	0:00:12	14 kph
14/12/2015 12:08	ON	N22.16039 E113.87799	42 m	0:00:11	14 kph
14/12/2015 12:08	ON	N22.16069 E113.87800	34 m	0:00:09	14 kph
14/12/2015 12:08	ON	N22.16107 E113.87804	42 m	0:00:11	14 kph
14/12/2015 12:08	ON	N22.16137 E113.87808	34 m	0:00:09	14 kph
14/12/2015 12:08	ON	N22.16171 E113.87811	38 m	0:00:10	14 kph
14/12/2015 12:09	ON	N22.16215 E113.87812	50 m	0:00:13	14 kph
14/12/2015 12:09	ON	N22.16253 E113.87813	42 m	0:00:11	14 kph
14/12/2015 12:09	ON	N22.16291 E113.87813	42 m	0:00:11	14 kph
14/12/2015 12:09	ON	N22.16329 E113.87808	43 m	0:00:11	14 kph
14/12/2015 12:09	ON	N22.16378 E113.87803	55 m	0:00:14	14 kph
14/12/2015 12:10	ON	N22.16424 E113.87805	51 m	0:00:13	14 kph
14/12/2015 12:10	ON	N22.16459 E113.87808	39 m	0:00:10	14 kph
14/12/2015 12:10	ON	N22.16498 E113.87808	43 m	0:00:11	14 kph
14/12/2015 12:10	ON	N22.16543 E113.87807	50 m	0:00:13	14 kph
14/12/2015 12:10	ON	N22.16582 E113.87811	44 m	0:00:12	13 kph
14/12/2015 12:11	ON	N22.16618 E113.87817	40 m	0:00:11	13 kph
14/12/2015 12:11	ON	N22.16660 E113.87817	47 m	0:00:13	13 kph
14/12/2015 12:11	ON	N22.16694 E113.87809	39 m	0:00:11	13 kph
14/12/2015 12:11	ON	N22.16736 E113.87799	48 m	0:00:13	13 kph
14/12/2015 12:11	ON	N22.16775 E113.87801	44 m	0:00:12	13 kph
14/12/2015 12:12	ON	N22.16815 E113.87811	45 m	0:00:12	13 kph
14/12/2015 12:12	ON	N22.16851 E113.87815	41 m	0:00:11	13 kph
14/12/2015 12:12	ON	N22.16890 E113.87812	43 m	0:00:12	13 kph
14/12/2015 12:12	ON	N22.16936 E113.87808	52 m	0:00:14	13 kph
14/12/2015 12:12	ON	N22.16976 E113.87807	44 m	0:00:12	13 kph
14/12/2015 12:13	ON	N22.17016 E113.87808	44 m	0:00:12	13 kph
14/12/2015 12:13	ON	N22.17066 E113.87813	56 m	0:00:15	13 kph
14/12/2015 12:13	ON	N22.17106 E113.87812	45 m	0:00:12	13 kph
14/12/2015 12:13	ON	N22.17142 E113.87807	41 m	0:00:11	13 kph
14/12/2015 12:14	ON	N22.17185 E113.87803	48 m	0:00:13	13 kph
14/12/2015 12:14	ON	N22.17229 E113.87802	49 m	0:00:13	13 kph
14/12/2015 12:14	ON	N22.17273 E113.87803	49 m	0:00:13	14 kph
14/12/2015 12:14	ON	N22.17315 E113.87800	48 m	0:00:13	13 kph
14/12/2015 12:14	ON	N22.17351 E113.87797	40 m	0:00:11	13 kph
14/12/2015 12:15	ON	N22.17390 E113.87802	44 m	0:00:12	13 kph
14/12/2015 12:15	ON	N22.17429 E113.87811	44 m	0:00:12	13 kph
14/12/2015 12:15	ON	N22.17475 E113.87815	51 m	0:00:14	13 kph
14/12/2015 12:15	ON	N22.17521 E113.87811	52 m	0:00:14	13 kph
14/12/2015 12:15	ON	N22.17557 E113.87805	41 m	0:00:11	13 kph
14/12/2015 12:16	ON	N22.17590 E113.87804	36 m	0:00:10	13 kph
14/12/2015 12:16	ON	N22.17622 E113.87807	36 m	0:00:10	13 kph
14/12/2015 12:16	ON	N22.17654 E113.87812	36 m	0:00:10	13 kph
14/12/2015 12:16	ON	N22.17692 E113.87815	43 m	0:00:12	13 kph
14/12/2015 12:16	ON	N22.17728 E113.87812	40 m	0:00:11	13 kph
14/12/2015 12:17	ON	N22.17768 E113.87812	44 m	0:00:12	13 kph
14/12/2015 12:17	ON	N22.17814 E113.87816	52 m	0:00:14	13 kph
14/12/2015 12:17	ON	N22.17861 E113.87816	52 m	0:00:14	13 kph
14/12/2015 12:17	ON	N22.17904 E113.87811	48 m	0:00:13	13 kph
14/12/2015 12:17	ON	N22.17953 E113.87807	56 m	0:00:15	13 kph
14/12/2015 12:18	ON	N22.17993 E113.87810	44 m	0:00:12	13 kph
14/12/2015 12:18	ON	N22.18032 E113.87816	44 m	0:00:12	13 kph
14/12/2015 12:18	ON	N22.18085 E113.87820	59 m	0:00:16	13 kph
14/12/2015 12:18	ON	N22.18135 E113.87817	55 m	0:00:15	13 kph
14/12/2015 12:19	ON	N22.18167 E113.87811	37 m	0:00:10	13 kph
14/12/2015 12:19	ON	N22.18203 E113.87807	40 m	0:00:11	13 kph
14/12/2015 12:19	ON	N22.18248 E113.87811	51 m	0:00:14	13 kph
14/12/2015 12:19	ON	N22.18297 E113.87816	54 m	0:00:15	13 kph
14/12/2015 12:19	ON	N22.18349 E113.87814	58 m	0:00:16	13 kph
14/12/2015 12:20	ON	N22.18415 E113.87814	74 m	0:00:20	13 kph
14/12/2015 12:20	ON	N22.18458 E113.87814	48 m	0:00:13	13 kph
14/12/2015 12:20	ON	N22.18495 E113.87813	41 m	0:00:11	13 kph
14/12/2015 12:20	ON	N22.18540 E113.87811	50 m	0:00:14	13 kph
14/12/2015 12:21	ON	N22.18599 E113.87811	65 m	0:00:18	13 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 12:21	ON	N22.18649 E113.87812	56 m	0:00:15	13 kph
14/12/2015 12:21	ON	N22.18701 E113.87811	58 m	0:00:16	13 kph
14/12/2015 12:21	ON	N22.18744 E113.87808	48 m	0:00:13	13 kph
14/12/2015 12:22	ON	N22.18797 E113.87804	59 m	0:00:16	13 kph
14/12/2015 12:22	ON	N22.18847 E113.87803	56 m	0:00:15	13 kph
14/12/2015 12:22	ON	N22.18893 E113.87805	51 m	0:00:14	13 kph
14/12/2015 12:22	ON	N22.18939 E113.87806	51 m	0:00:14	13 kph
14/12/2015 12:23	ON	N22.18992 E113.87806	59 m	0:00:16	13 kph
14/12/2015 12:23	ON	N22.19044 E113.87803	59 m	0:00:16	13 kph
14/12/2015 12:23	ON	N22.19090 E113.87803	51 m	0:00:14	13 kph
14/12/2015 12:24	ON	N22.19153 E113.87809	70 m	0:00:19	13 kph
14/12/2015 12:24	ON	N22.19212 E113.87807	66 m	0:00:18	13 kph
14/12/2015 12:24	ON	N22.19257 E113.87805	51 m	0:00:14	13 kph
14/12/2015 12:24	ON	N22.19312 E113.87808	61 m	0:00:17	13 kph
14/12/2015 12:25	ON	N22.19365 E113.87803	59 m	0:00:16	13 kph
14/12/2015 12:25	ON	N22.19417 E113.87802	58 m	0:00:16	13 kph
14/12/2015 12:25	ON	N22.19457 E113.87807	45 m	0:00:13	13 kph
14/12/2015 12:25	ON	N22.19517 E113.87808	66 m	0:00:18	13 kph
14/12/2015 12:26	ON	N22.19577 E113.87802	67 m	0:00:18	13 kph
14/12/2015 12:26	ON	N22.19623 E113.87803	51 m	0:00:14	13 kph
14/12/2015 12:26	ON	N22.19682 E113.87805	66 m	0:00:18	13 kph
14/12/2015 12:26	ON	N22.19731 E113.87808	54 m	0:00:15	13 kph
14/12/2015 12:27	ON	N22.19776 E113.87812	50 m	0:00:14	13 kph
14/12/2015 12:27	ON	N22.19824 E113.87814	54 m	0:00:15	13 kph
14/12/2015 12:27	ON	N22.19881 E113.87800	65 m	0:00:18	13 kph
14/12/2015 12:28	ON	N22.19934 E113.87793	59 m	0:00:16	13 kph
14/12/2015 12:28	ON	N22.19983 E113.87800	55 m	0:00:15	13 kph
14/12/2015 12:28	ON	N22.20042 E113.87802	66 m	0:00:18	13 kph
14/12/2015 12:28	ON	N22.20094 E113.87791	59 m	0:00:16	13 kph
14/12/2015 12:29	ON	N22.20139 E113.87790	50 m	0:00:14	13 kph
14/12/2015 12:29	ON	N22.20194 E113.87803	62 m	0:00:17	13 kph
14/12/2015 12:29	ON	N22.20238 E113.87808	50 m	0:00:14	13 kph
14/12/2015 12:29	ON	N22.20301 E113.87808	70 m	0:00:19	13 kph
14/12/2015 12:30	ON	N22.20357 E113.87807	62 m	0:00:17	13 kph
14/12/2015 12:30	ON	N22.20432 E113.87809	84 m	0:00:23	13 kph
14/12/2015 12:30	ON	N22.20484 E113.87811	58 m	0:00:16	13 kph
14/12/2015 12:31	ON	N22.20542 E113.87808	65 m	0:00:18	13 kph
14/12/2015 12:31	ON	N22.20613 E113.87808	79 m	0:00:22	13 kph
14/12/2015 12:31	ON	N22.20671 E113.87814	65 m	0:00:18	13 kph
14/12/2015 12:32	ON	N22.20719 E113.87838	59 m	0:00:17	12 kph
14/12/2015 12:32	ON	N22.20755 E113.87877	57 m	0:00:16	13 kph
14/12/2015 12:32	ON	N22.20788 E113.87911	51 m	0:00:14	13 kph
14/12/2015 12:32	ON	N22.20832 E113.87954	66 m	0:00:18	13 kph
14/12/2015 12:33	ON	N22.20869 E113.87991	55 m	0:00:15	13 kph
14/12/2015 12:33	ON	N22.20916 E113.88037	71 m	0:00:19	13 kph
14/12/2015 12:33	ON	N22.20955 E113.88077	60 m	0:00:16	13 kph
14/12/2015 12:34	ON	N22.21006 E113.88130	79 m	0:00:21	13 kph
14/12/2015 12:34	ON	N22.21058 E113.88187	82 m	0:00:22	13 kph
14/12/2015 12:34	ON	N22.21097 E113.88236	67 m	0:00:18	13 kph
14/12/2015 12:35	ON	N22.21138 E113.88294	74 m	0:00:20	13 kph
14/12/2015 12:35	ON	N22.21180 E113.88352	77 m	0:00:21	13 kph
14/12/2015 12:35	ON	N22.21220 E113.88401	67 m	0:00:18	13 kph
14/12/2015 12:36	ON	N22.21271 E113.88460	83 m	0:00:22	14 kph
14/12/2015 12:36	ON	N22.21317 E113.88518	79 m	0:00:21	14 kph
14/12/2015 12:36	ON	N22.21355 E113.88570	68 m	0:00:18	14 kph
14/12/2015 12:37	ON	N22.21398 E113.88623	73 m	0:00:19	14 kph
14/12/2015 12:37	ON	N22.21433 E113.88669	61 m	0:00:16	14 kph
14/12/2015 12:37	ON	N22.21479 E113.88730	81 m	0:00:21	14 kph
14/12/2015 12:37	ON	N22.21512 E113.88786	69 m	0:00:19	13 kph
14/12/2015 12:38	ON	N22.21490 E113.88813	37 m	0:00:13	10 kph
14/12/2015 12:38	ON	N22.21445 E113.88804	50 m	0:00:15	12 kph
14/12/2015 12:38	ON	N22.21381 E113.88796	72 m	0:00:19	14 kph
14/12/2015 12:39	ON	N22.21320 E113.88797	68 m	0:00:18	14 kph
14/12/2015 12:39	ON	N22.21268 E113.88800	58 m	0:00:15	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 12:39	ON	N22.21205 E113.88801	70 m	0:00:18	14 kph
14/12/2015 12:39	ON	N22.21139 E113.88804	73 m	0:00:19	14 kph
14/12/2015 12:40	ON	N22.21071 E113.88812	76 m	0:00:20	14 kph
14/12/2015 12:40	ON	N22.21016 E113.88814	61 m	0:00:16	14 kph
14/12/2015 12:40	ON	N22.20965 E113.88815	57 m	0:00:15	14 kph
14/12/2015 12:41	ON	N22.20900 E113.88818	73 m	0:00:19	14 kph
14/12/2015 12:41	ON	N22.20842 E113.88820	64 m	0:00:17	14 kph
14/12/2015 12:41	ON	N22.20776 E113.88820	73 m	0:00:19	14 kph
14/12/2015 12:41	ON	N22.20725 E113.88820	57 m	0:00:15	14 kph
14/12/2015 12:42	ON	N22.20671 E113.88829	61 m	0:00:16	14 kph
14/12/2015 12:42	ON	N22.20635 E113.88838	42 m	0:00:14	11 kph
14/12/2015 12:42	OFF	N22.20629 E113.88840	7 m	0:00:03	8 kph
14/12/2015 12:42	OFF	N22.20622 E113.88842	8 m	0:00:04	7 kph
14/12/2015 12:42	OFF	N22.20601 E113.88849	24 m	0:00:16	5 kph
14/12/2015 12:43	OFF	N22.20586 E113.88852	17 m	0:00:13	5 kph
14/12/2015 12:43	OFF	N22.20584 E113.88852	2 m	0:00:02	4 kph
14/12/2015 12:43	OFF	N22.20582 E113.88852	2 m	0:00:02	4 kph
14/12/2015 12:43	OFF	N22.20570 E113.88853	13 m	0:00:12	4 kph
14/12/2015 12:43	OFF	N22.20559 E113.88852	13 m	0:00:14	3 kph
14/12/2015 12:43	OFF	N22.20549 E113.88849	12 m	0:00:15	3 kph
14/12/2015 12:44	OFF	N22.20540 E113.88845	11 m	0:00:15	3 kph
14/12/2015 12:44	OFF	N22.20534 E113.88840	8 m	0:00:12	2 kph
14/12/2015 12:44	OFF	N22.20529 E113.88836	7 m	0:00:12	2 kph
14/12/2015 12:44	OFF	N22.20524 E113.88828	10 m	0:00:18	2 kph
14/12/2015 12:45	OFF	N22.20521 E113.88822	7 m	0:00:18	1.4 kph
14/12/2015 12:45	OFF	N22.20517 E113.88818	6 m	0:00:16	1.3 kph
14/12/2015 12:45	OFF	N22.20516 E113.88817	2 m	0:00:14	0.4 kph
14/12/2015 12:45	OFF	N22.20514 E113.88815	3 m	0:00:16	0.7 kph
14/12/2015 12:46	OFF	N22.20513 E113.88814	2 m	0:00:11	0.8 kph
14/12/2015 12:46	OFF	N22.20510 E113.88811	3 m	0:00:15	0.8 kph
14/12/2015 12:46	OFF	N22.20508 E113.88809	4 m	0:00:15	0.9 kph
14/12/2015 12:46	OFF	N22.20505 E113.88808	3 m	0:00:12	0.9 kph
14/12/2015 12:46	OFF	N22.20502 E113.88806	5 m	0:00:16	1.0 kph
14/12/2015 12:47	OFF	N22.20495 E113.88801	9 m	0:00:19	2 kph
14/12/2015 12:47	OFF	N22.20494 E113.88800	2 m	0:00:01	5 kph
14/12/2015 12:47	OFF	N22.20491 E113.88793	8 m	0:00:05	6 kph
14/12/2015 12:47	OFF	N22.20491 E113.88772	22 m	0:00:18	4 kph
14/12/2015 12:47	OFF	N22.20507 E113.88774	17 m	0:00:18	3 kph
14/12/2015 12:48	OFF	N22.20523 E113.88792	26 m	0:00:16	6 kph
14/12/2015 12:48	OFF	N22.20543 E113.88810	28 m	0:00:18	6 kph
14/12/2015 12:48	OFF	N22.20559 E113.88819	21 m	0:00:21	4 kph
14/12/2015 12:49	OFF	N22.20566 E113.88822	8 m	0:00:16	2 kph
14/12/2015 12:49	OFF	N22.20567 E113.88822	1 m	0:00:12	0.4 kph
14/12/2015 12:49	OFF	N22.20569 E113.88823	2 m	0:00:14	0.6 kph
14/12/2015 12:49	OFF	N22.20570 E113.88824	1 m	0:00:14	0.3 kph
14/12/2015 12:50	OFF	N22.20570 E113.88824	1 m	0:00:16	0.2 kph
14/12/2015 12:50	OFF	N22.20571 E113.88827	4 m	0:00:17	0.8 kph
14/12/2015 12:50	OFF	N22.20572 E113.88828	1 m	0:00:01	3 kph
14/12/2015 12:50	OFF	N22.20575 E113.88831	4 m	0:00:04	4 kph
14/12/2015 12:50	OFF	N22.20591 E113.88826	19 m	0:00:17	4 kph
14/12/2015 12:51	OFF	N22.20596 E113.88807	20 m	0:00:17	4 kph
14/12/2015 12:51	OFF	N22.20596 E113.88800	7 m	0:00:06	4 kph
14/12/2015 12:51	OFF	N22.20593 E113.88788	13 m	0:00:13	4 kph
14/12/2015 12:51	OFF	N22.20590 E113.88782	7 m	0:00:14	2 kph
14/12/2015 12:51	OFF	N22.20589 E113.88783	2 m	0:00:16	0.4 kph
14/12/2015 12:52	OFF	N22.20587 E113.88784	2 m	0:00:18	0.5 kph
14/12/2015 12:52	OFF	N22.20586 E113.88785	2 m	0:00:17	0.4 kph
14/12/2015 12:52	OFF	N22.20578 E113.88780	10 m	0:00:14	3 kph
14/12/2015 12:53	OFF	N22.20566 E113.88765	20 m	0:00:20	4 kph
14/12/2015 12:53	OFF	N22.20561 E113.88754	12 m	0:00:16	3 kph
14/12/2015 12:53	OFF	N22.20553 E113.88739	18 m	0:00:17	4 kph
14/12/2015 12:53	OFF	N22.20548 E113.88729	12 m	0:00:10	4 kph
9/11/2015 13:15	ON	N22.15671 E113.88820	70 m	0:00:16	16 kph
9/11/2015 13:15	ON	N22.15608 E113.88823	70 m	0:00:16	16 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 12:54	OFF	N22.20539 E113.88715	17 m	0:00:17	4 kph
14/12/2015 12:54	OFF	N22.20532 E113.88703	15 m	0:00:15	4 kph
14/12/2015 12:54	OFF	N22.20525 E113.88692	14 m	0:00:17	3 kph
14/12/2015 12:54	OFF	N22.20524 E113.88673	20 m	0:00:15	5 kph
14/12/2015 12:55	OFF	N22.20552 E113.88654	36 m	0:00:14	9 kph
14/12/2015 12:55	OFF	N22.20613 E113.88659	68 m	0:00:19	13 kph
14/12/2015 12:55	OFF	N22.20640 E113.88696	49 m	0:00:14	13 kph
14/12/2015 12:55	OFF	N22.20651 E113.88744	51 m	0:00:14	13 kph
14/12/2015 12:56	OFF	N22.20643 E113.88794	52 m	0:00:15	12 kph
14/12/2015 12:56	ON	N22.20626 E113.88804	22 m	0:00:07	11 kph
14/12/2015 12:56	ON	N22.20582 E113.88800	49 m	0:00:14	13 kph
14/12/2015 12:56	ON	N22.20517 E113.88797	73 m	0:00:19	14 kph
14/12/2015 12:56	ON	N22.20467 E113.88795	55 m	0:00:14	14 kph
14/12/2015 12:57	ON	N22.20419 E113.88797	54 m	0:00:14	14 kph
14/12/2015 12:57	ON	N22.20377 E113.88801	46 m	0:00:12	14 kph
14/12/2015 12:57	ON	N22.20338 E113.88805	43 m	0:00:11	14 kph
14/12/2015 12:57	ON	N22.20280 E113.88812	66 m	0:00:17	14 kph
14/12/2015 12:58	ON	N22.20220 E113.88814	66 m	0:00:17	14 kph
14/12/2015 12:58	ON	N22.20166 E113.88813	60 m	0:00:15	14 kph
14/12/2015 12:58	ON	N22.20121 E113.88819	51 m	0:00:13	14 kph
14/12/2015 12:58	ON	N22.20069 E113.88828	58 m	0:00:15	14 kph
14/12/2015 12:59	ON	N22.20023 E113.88830	52 m	0:00:13	14 kph
14/12/2015 12:59	ON	N22.19963 E113.88833	67 m	0:00:17	14 kph
14/12/2015 12:59	ON	N22.19911 E113.88827	58 m	0:00:15	14 kph
14/12/2015 12:59	ON	N22.19852 E113.88822	65 m	0:00:16	15 kph
14/12/2015 13:00	ON	N22.19807 E113.88819	51 m	0:00:13	14 kph
14/12/2015 13:00	ON	N22.19757 E113.88817	55 m	0:00:14	14 kph
14/12/2015 13:00	ON	N22.19707 E113.88816	56 m	0:00:14	14 kph
14/12/2015 13:00	ON	N22.19651 E113.88814	63 m	0:00:16	14 kph
14/12/2015 13:00	ON	N22.19616 E113.88814	39 m	0:00:10	14 kph
14/12/2015 13:01	ON	N22.19580 E113.88814	39 m	0:00:10	14 kph
14/12/2015 13:01	ON	N22.19527 E113.88815	59 m	0:00:15	14 kph
14/12/2015 13:01	ON	N22.19473 E113.88812	60 m	0:00:15	14 kph
14/12/2015 13:01	ON	N22.19409 E113.88816	71 m	0:00:18	14 kph
14/12/2015 13:02	ON	N22.19360 E113.88821	55 m	0:00:14	14 kph
14/12/2015 13:02	ON	N22.19307 E113.88824	60 m	0:00:15	14 kph
14/12/2015 13:02	ON	N22.19256 E113.88823	57 m	0:00:14	15 kph
14/12/2015 13:03	ON	N22.19184 E113.88819	80 m	0:00:20	14 kph
14/12/2015 13:03	ON	N22.19133 E113.88820	56 m	0:00:14	14 kph
14/12/2015 13:03	ON	N22.19073 E113.88824	67 m	0:00:17	14 kph
14/12/2015 13:03	ON	N22.19029 E113.88825	49 m	0:00:12	15 kph
14/12/2015 13:03	ON	N22.18975 E113.88819	61 m	0:00:15	15 kph
14/12/2015 13:04	ON	N22.18900 E113.88822	83 m	0:00:21	14 kph
14/12/2015 13:04	ON	N22.18846 E113.88828	60 m	0:00:15	14 kph
14/12/2015 13:04	ON	N22.18781 E113.88828	73 m	0:00:18	15 kph
14/12/2015 13:05	ON	N22.18716 E113.88828	72 m	0:00:18	14 kph
14/12/2015 13:05	ON	N22.18665 E113.88827	56 m	0:00:14	14 kph
14/12/2015 13:05	ON	N22.18610 E113.88826	62 m	0:00:15	15 kph
14/12/2015 13:05	ON	N22.18549 E113.88825	68 m	0:00:17	14 kph
14/12/2015 13:06	ON	N22.18494 E113.88825	60 m	0:00:15	14 kph
14/12/2015 13:06	ON	N22.18440 E113.88827	61 m	0:00:15	15 kph
14/12/2015 13:06	ON	N22.18383 E113.88827	64 m	0:00:16	14 kph
14/12/2015 13:06	ON	N22.18332 E113.88823	57 m	0:00:14	15 kph
14/12/2015 13:07	ON	N22.18256 E113.88811	85 m	0:00:21	15 kph
14/12/2015 13:07	ON	N22.18186 E113.88815	78 m	0:00:19	15 kph
14/12/2015 13:07	ON	N22.18124 E113.88814	69 m	0:00:17	15 kph
14/12/2015 13:08	ON	N22.18070 E113.88815	61 m	0:00:15	15 kph
14/12/2015 13:08	ON	N22.18022 E113.88820	53 m	0:00:13	15 kph
14/12/2015 13:08	ON	N22.17963 E113.88823	65 m	0:00:16	15 kph
14/12/2015 13:08	ON	N22.17898 E113.88815	74 m	0:00:18	15 kph
14/12/2015 13:09	ON	N22.17843 E113.88813	61 m	0:00:15	15 kph
14/12/2015 13:09	ON	N22.17781 E113.88815	69 m	0:00:17	15 kph
14/12/2015 13:09	ON	N22.17712 E113.88822	77 m	0:00:19	15 kph
14/12/2015 13:10	ON	N22.17647 E113.88823	72 m	0:00:18	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 13:10	ON	N22.17585 E113.88824	68 m	0:00:17	14 kph
14/12/2015 13:10	ON	N22.17531 E113.88824	60 m	0:00:15	14 kph
14/12/2015 13:10	ON	N22.17458 E113.88822	81 m	0:00:20	15 kph
14/12/2015 13:11	ON	N22.17408 E113.88823	56 m	0:00:14	14 kph
14/12/2015 13:11	ON	N22.17361 E113.88825	52 m	0:00:13	14 kph
14/12/2015 13:11	ON	N22.17302 E113.88823	65 m	0:00:16	15 kph
14/12/2015 13:11	ON	N22.17255 E113.88820	52 m	0:00:13	14 kph
14/12/2015 13:12	ON	N22.17208 E113.88819	52 m	0:00:13	14 kph
14/12/2015 13:12	ON	N22.17154 E113.88820	61 m	0:00:15	15 kph
14/12/2015 13:12	ON	N22.17103 E113.88821	56 m	0:00:14	14 kph
14/12/2015 13:12	ON	N22.17050 E113.88817	60 m	0:00:15	14 kph
14/12/2015 13:13	ON	N22.17010 E113.88815	45 m	0:00:11	15 kph
14/12/2015 13:13	ON	N22.16967 E113.88817	48 m	0:00:12	14 kph
14/12/2015 13:13	ON	N22.16924 E113.88817	48 m	0:00:12	14 kph
14/12/2015 13:13	ON	N22.16877 E113.88818	52 m	0:00:13	14 kph
14/12/2015 13:13	ON	N22.16817 E113.88817	67 m	0:00:17	14 kph
14/12/2015 13:14	ON	N22.16764 E113.88815	59 m	0:00:15	14 kph
14/12/2015 13:14	ON	N22.16715 E113.88816	55 m	0:00:14	14 kph
14/12/2015 13:14	ON	N22.16647 E113.88817	75 m	0:00:19	14 kph
14/12/2015 13:14	ON	N22.16597 E113.88822	56 m	0:00:14	14 kph
14/12/2015 13:15	ON	N22.16544 E113.88827	59 m	0:00:15	14 kph
14/12/2015 13:15	ON	N22.16491 E113.88828	59 m	0:00:15	14 kph
14/12/2015 13:15	ON	N22.16434 E113.88822	64 m	0:00:16	14 kph
14/12/2015 13:15	ON	N22.16377 E113.88821	63 m	0:00:16	14 kph
14/12/2015 13:16	ON	N22.16325 E113.88832	59 m	0:00:15	14 kph
14/12/2015 13:16	ON	N22.16275 E113.88834	56 m	0:00:14	14 kph
14/12/2015 13:16	ON	N22.16229 E113.88829	52 m	0:00:13	14 kph
14/12/2015 13:16	ON	N22.16179 E113.88825	55 m	0:00:14	14 kph
14/12/2015 13:17	ON	N22.16136 E113.88827	48 m	0:00:12	14 kph
14/12/2015 13:17	ON	N22.16083 E113.88830	59 m	0:00:15	14 kph
14/12/2015 13:17	ON	N22.16023 E113.88816	69 m	0:00:17	15 kph
14/12/2015 13:17	ON	N22.15988 E113.88809	40 m	0:00:10	14 kph
14/12/2015 13:18	ON	N22.15932 E113.88808	62 m	0:00:16	14 kph
14/12/2015 13:18	ON	N22.15875 E113.88808	63 m	0:00:16	14 kph
14/12/2015 13:18	ON	N22.15832 E113.88809	48 m	0:00:12	15 kph
14/12/2015 13:18	ON	N22.15789 E113.88811	48 m	0:00:12	14 kph
14/12/2015 13:18	ON	N22.15746 E113.88811	47 m	0:00:12	14 kph
14/12/2015 13:19	ON	N22.15700 E113.88810	52 m	0:00:13	14 kph
14/12/2015 13:19	ON	N22.15661 E113.88814	43 m	0:00:11	14 kph
14/12/2015 13:19	ON	N22.15623 E113.88822	43 m	0:00:11	14 kph
14/12/2015 13:19	ON	N22.15577 E113.88825	51 m	0:00:13	14 kph
14/12/2015 13:19	ON	N22.15543 E113.88818	39 m	0:00:10	14 kph
14/12/2015 13:20	ON	N22.15495 E113.88811	54 m	0:00:14	14 kph
14/12/2015 13:20	ON	N22.15443 E113.88818	58 m	0:00:15	14 kph
14/12/2015 13:20	ON	N22.15395 E113.88822	54 m	0:00:14	14 kph
14/12/2015 13:20	ON	N22.15350 E113.88817	51 m	0:00:13	14 kph
14/12/2015 13:21	ON	N22.15309 E113.88816	45 m	0:00:12	14 kph
14/12/2015 13:21	ON	N22.15261 E113.88828	55 m	0:00:14	14 kph
14/12/2015 13:21	ON	N22.15210 E113.88841	59 m	0:00:15	14 kph
14/12/2015 13:21	ON	N22.15169 E113.88840	46 m	0:00:12	14 kph
14/12/2015 13:21	ON	N22.15120 E113.88835	54 m	0:00:14	14 kph
14/12/2015 13:22	ON	N22.15068 E113.88825	59 m	0:00:15	14 kph
14/12/2015 13:22	ON	N22.15025 E113.88836	50 m	0:00:14	13 kph
14/12/2015 13:22	ON	N22.14999 E113.88874	49 m	0:00:14	13 kph
14/12/2015 13:22	ON	N22.14984 E113.88919	49 m	0:00:14	13 kph
14/12/2015 13:23	ON	N22.14977 E113.88959	43 m	0:00:12	13 kph
14/12/2015 13:23	ON	N22.14973 E113.89012	54 m	0:00:15	13 kph
14/12/2015 13:23	ON	N22.14967 E113.89064	54 m	0:00:15	13 kph
14/12/2015 13:23	ON	N22.14958 E113.89120	58 m	0:00:16	13 kph
14/12/2015 13:24	ON	N22.14948 E113.89173	56 m	0:00:15	13 kph
14/12/2015 13:24	ON	N22.14944 E113.89217	46 m	0:00:13	13 kph
14/12/2015 13:24	ON	N22.14939 E113.89272	57 m	0:00:16	13 kph
14/12/2015 13:24	ON	N22.14936 E113.89311	40 m	0:00:11	13 kph
14/12/2015 13:25	ON	N22.14932 E113.89360	51 m	0:00:14	13 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 13:25	ON	N22.14930 E113.89407	48 m	0:00:13	13 kph
14/12/2015 13:25	ON	N22.14929 E113.89459	54 m	0:00:15	13 kph
14/12/2015 13:25	ON	N22.14928 E113.89501	44 m	0:00:12	13 kph
14/12/2015 13:25	ON	N22.14929 E113.89551	51 m	0:00:14	13 kph
14/12/2015 13:26	ON	N22.14931 E113.89592	43 m	0:00:12	13 kph
14/12/2015 13:26	ON	N22.14935 E113.89638	47 m	0:00:13	13 kph
14/12/2015 13:26	ON	N22.14938 E113.89679	43 m	0:00:12	13 kph
14/12/2015 13:26	ON	N22.14952 E113.89707	32 m	0:00:11	11 kph
14/12/2015 13:26	ON	N22.14980 E113.89708	31 m	0:00:11	10 kph
14/12/2015 13:27	ON	N22.15016 E113.89704	40 m	0:00:12	12 kph
14/12/2015 13:27	ON	N22.15035 E113.89705	21 m	0:00:06	13 kph
14/12/2015 13:27	ON	N22.15070 E113.89707	39 m	0:00:11	13 kph
14/12/2015 13:27	ON	N22.15104 E113.89708	38 m	0:00:11	13 kph
14/12/2015 13:27	ON	N22.15142 E113.89705	43 m	0:00:12	13 kph
14/12/2015 13:28	ON	N22.15191 E113.89706	54 m	0:00:15	13 kph
14/12/2015 13:28	ON	N22.15236 E113.89710	50 m	0:00:14	13 kph
14/12/2015 13:28	ON	N22.15281 E113.89712	50 m	0:00:14	13 kph
14/12/2015 13:28	ON	N22.15330 E113.89717	54 m	0:00:15	13 kph
14/12/2015 13:28	ON	N22.15372 E113.89720	47 m	0:00:13	13 kph
14/12/2015 13:29	ON	N22.15418 E113.89721	51 m	0:00:14	13 kph
14/12/2015 13:29	ON	N22.15468 E113.89719	56 m	0:00:15	13 kph
14/12/2015 13:29	ON	N22.15515 E113.89720	52 m	0:00:14	13 kph
14/12/2015 13:29	ON	N22.15565 E113.89721	56 m	0:00:15	13 kph
14/12/2015 13:30	ON	N22.15625 E113.89718	67 m	0:00:18	13 kph
14/12/2015 13:30	ON	N22.15679 E113.89716	60 m	0:00:16	13 kph
14/12/2015 13:30	ON	N22.15742 E113.89721	71 m	0:00:19	13 kph
14/12/2015 13:31	ON	N22.15795 E113.89723	59 m	0:00:16	13 kph
14/12/2015 13:31	ON	N22.15835 E113.89723	44 m	0:00:12	13 kph
14/12/2015 13:31	ON	N22.15877 E113.89724	47 m	0:00:13	13 kph
14/12/2015 13:31	ON	N22.15920 E113.89725	48 m	0:00:13	13 kph
14/12/2015 13:31	ON	N22.15976 E113.89723	63 m	0:00:17	13 kph
14/12/2015 13:32	ON	N22.16026 E113.89721	55 m	0:00:15	13 kph
14/12/2015 13:32	ON	N22.16062 E113.89721	40 m	0:00:11	13 kph
14/12/2015 13:32	ON	N22.16108 E113.89722	51 m	0:00:14	13 kph
14/12/2015 13:32	ON	N22.16161 E113.89722	59 m	0:00:16	13 kph
14/12/2015 13:33	ON	N22.16206 E113.89719	51 m	0:00:14	13 kph
14/12/2015 13:33	ON	N22.16251 E113.89721	50 m	0:00:14	13 kph
14/12/2015 13:33	ON	N22.16289 E113.89723	43 m	0:00:12	13 kph
14/12/2015 13:33	ON	N22.16341 E113.89722	57 m	0:00:16	13 kph
14/12/2015 13:34	ON	N22.16385 E113.89722	49 m	0:00:14	13 kph
14/12/2015 13:34	ON	N22.16437 E113.89719	58 m	0:00:16	13 kph
14/12/2015 13:34	ON	N22.16488 E113.89719	57 m	0:00:16	13 kph
14/12/2015 13:34	ON	N22.16546 E113.89722	64 m	0:00:18	13 kph
14/12/2015 13:35	ON	N22.16606 E113.89721	67 m	0:00:19	13 kph
14/12/2015 13:35	ON	N22.16655 E113.89724	54 m	0:00:15	13 kph
14/12/2015 13:35	ON	N22.16722 E113.89732	76 m	0:00:21	13 kph
14/12/2015 13:36	ON	N22.16777 E113.89738	61 m	0:00:17	13 kph
14/12/2015 13:36	ON	N22.16827 E113.89738	55 m	0:00:15	13 kph
14/12/2015 13:36	ON	N22.16881 E113.89735	60 m	0:00:16	14 kph
14/12/2015 13:36	ON	N22.16950 E113.89731	77 m	0:00:20	14 kph
14/12/2015 13:37	ON	N22.17015 E113.89729	72 m	0:00:19	14 kph
14/12/2015 13:37	ON	N22.17091 E113.89723	85 m	0:00:22	14 kph
14/12/2015 13:37	ON	N22.17145 E113.89716	60 m	0:00:16	14 kph
14/12/2015 13:38	ON	N22.17198 E113.89710	59 m	0:00:16	13 kph
14/12/2015 13:38	ON	N22.17250 E113.89717	58 m	0:00:16	13 kph
14/12/2015 13:38	ON	N22.17285 E113.89722	39 m	0:00:11	13 kph
14/12/2015 13:38	ON	N22.17338 E113.89725	58 m	0:00:16	13 kph
14/12/2015 13:39	ON	N22.17397 E113.89728	66 m	0:00:18	13 kph
14/12/2015 13:39	ON	N22.17456 E113.89727	66 m	0:00:18	13 kph
14/12/2015 13:39	ON	N22.17523 E113.89731	75 m	0:00:20	13 kph
14/12/2015 13:40	ON	N22.17597 E113.89730	82 m	0:00:22	13 kph
14/12/2015 13:40	ON	N22.17661 E113.89727	71 m	0:00:19	14 kph
14/12/2015 13:40	ON	N22.17721 E113.89731	67 m	0:00:18	13 kph
14/12/2015 13:41	ON	N22.17771 E113.89731	56 m	0:00:15	13 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 13:41	ON	N22.17835 E113.89727	71 m	0:00:19	14 kph
14/12/2015 13:41	ON	N22.17895 E113.89722	67 m	0:00:18	13 kph
14/12/2015 13:41	ON	N22.17950 E113.89718	61 m	0:00:16	14 kph
14/12/2015 13:42	ON	N22.18023 E113.89718	82 m	0:00:22	13 kph
14/12/2015 13:42	ON	N22.18076 E113.89719	59 m	0:00:16	13 kph
14/12/2015 13:42	ON	N22.18125 E113.89718	54 m	0:00:15	13 kph
14/12/2015 13:43	ON	N22.18181 E113.89718	63 m	0:00:17	13 kph
14/12/2015 13:43	ON	N22.18249 E113.89722	76 m	0:00:21	13 kph
14/12/2015 13:43	ON	N22.18308 E113.89721	65 m	0:00:18	13 kph
14/12/2015 13:44	ON	N22.18366 E113.89719	65 m	0:00:18	13 kph
14/12/2015 13:44	ON	N22.18418 E113.89722	58 m	0:00:16	13 kph
14/12/2015 13:44	ON	N22.18478 E113.89725	67 m	0:00:19	13 kph
14/12/2015 13:45	ON	N22.18545 E113.89725	74 m	0:00:21	13 kph
14/12/2015 13:45	ON	N22.18605 E113.89729	67 m	0:00:19	13 kph
14/12/2015 13:45	ON	N22.18657 E113.89727	58 m	0:00:16	13 kph
14/12/2015 13:45	ON	N22.18722 E113.89719	73 m	0:00:20	13 kph
14/12/2015 13:46	ON	N22.18778 E113.89721	62 m	0:00:17	13 kph
14/12/2015 13:46	ON	N22.18847 E113.89722	77 m	0:00:21	13 kph
14/12/2015 13:46	ON	N22.18906 E113.89719	66 m	0:00:18	13 kph
14/12/2015 13:47	ON	N22.18952 E113.89719	51 m	0:00:14	13 kph
14/12/2015 13:47	ON	N22.19002 E113.89718	56 m	0:00:15	13 kph
14/12/2015 13:47	ON	N22.19062 E113.89714	67 m	0:00:18	13 kph
14/12/2015 13:47	ON	N22.19128 E113.89718	74 m	0:00:20	13 kph
14/12/2015 13:48	ON	N22.19194 E113.89722	73 m	0:00:20	13 kph
14/12/2015 13:48	ON	N22.19247 E113.89726	59 m	0:00:16	13 kph
14/12/2015 13:48	ON	N22.19299 E113.89729	59 m	0:00:16	13 kph
14/12/2015 13:49	ON	N22.19348 E113.89730	54 m	0:00:15	13 kph
14/12/2015 13:49	ON	N22.19400 E113.89727	58 m	0:00:16	13 kph
14/12/2015 13:49	ON	N22.19463 E113.89730	70 m	0:00:19	13 kph
14/12/2015 13:50	ON	N22.19524 E113.89733	68 m	0:00:21	12 kph
14/12/2015 13:50	ON	N22.19557 E113.89735	37 m	0:00:18	7 kph
14/12/2015 13:50	ON	N22.19581 E113.89737	27 m	0:00:15	6 kph
14/12/2015 13:50	ON	N22.19611 E113.89737	33 m	0:00:16	7 kph
14/12/2015 13:51	ON	N22.19646 E113.89733	39 m	0:00:15	9 kph
14/12/2015 13:51	ON	N22.19699 E113.89732	59 m	0:00:22	10 kph
14/12/2015 13:51	ON	N22.19727 E113.89732	31 m	0:00:11	10 kph
14/12/2015 13:51	ON	N22.19771 E113.89728	50 m	0:00:14	13 kph
14/12/2015 13:52	ON	N22.19835 E113.89721	71 m	0:00:19	14 kph
14/12/2015 13:52	OFF	N22.19873 E113.89725	42 m	0:00:17	9 kph
14/12/2015 13:52	OFF	N22.19893 E113.89727	23 m	0:00:18	5 kph
14/12/2015 13:53	OFF	N22.19903 E113.89729	11 m	0:00:15	3 kph
14/12/2015 13:53	OFF	N22.19908 E113.89731	7 m	0:00:18	1.3 kph
14/12/2015 13:53	OFF	N22.19909 E113.89733	2 m	0:00:14	0.5 kph
14/12/2015 13:53	OFF	N22.19910 E113.89734	2 m	0:00:14	0.5 kph
14/12/2015 13:54	OFF	N22.19908 E113.89736	2 m	0:00:15	0.6 kph
14/12/2015 13:54	OFF	N22.19906 E113.89738	3 m	0:00:15	0.8 kph
14/12/2015 13:54	OFF	N22.19902 E113.89740	5 m	0:00:17	1.0 kph
14/12/2015 13:54	OFF	N22.19899 E113.89743	5 m	0:00:16	1.0 kph
14/12/2015 13:55	OFF	N22.19898 E113.89747	4 m	0:00:15	1.0 kph
14/12/2015 13:55	OFF	N22.19914 E113.89754	20 m	0:00:19	4 kph
14/12/2015 13:55	OFF	N22.19940 E113.89744	30 m	0:00:17	6 kph
14/12/2015 13:56	OFF	N22.19975 E113.89716	48 m	0:00:20	9 kph
14/12/2015 13:56	OFF	N22.20017 E113.89680	60 m	0:00:23	9 kph
14/12/2015 13:56	OFF	N22.20053 E113.89649	51 m	0:00:19	10 kph
14/12/2015 13:57	OFF	N22.20090 E113.89620	51 m	0:00:19	10 kph
14/12/2015 13:57	OFF	N22.20125 E113.89589	51 m	0:00:19	10 kph
14/12/2015 13:57	OFF	N22.20146 E113.89566	33 m	0:00:17	7 kph
14/12/2015 13:57	OFF	N22.20157 E113.89549	22 m	0:00:18	4 kph
14/12/2015 13:58	OFF	N22.20163 E113.89535	15 m	0:00:19	3 kph
14/12/2015 13:58	OFF	N22.20163 E113.89526	10 m	0:00:17	2 kph
14/12/2015 13:58	OFF	N22.20161 E113.89519	8 m	0:00:16	2 kph
14/12/2015 13:59	OFF	N22.20158 E113.89510	9 m	0:00:15	2 kph
14/12/2015 13:59	OFF	N22.20160 E113.89503	8 m	0:00:08	4 kph
14/12/2015 13:59	OFF	N22.20164 E113.89496	8 m	0:00:07	4 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 13:59	OFF	N22.20184 E113.89481	27 m	0:00:19	5 kph
14/12/2015 13:59	OFF	N22.20204 E113.89469	25 m	0:00:15	6 kph
14/12/2015 14:00	OFF	N22.20225 E113.89456	28 m	0:00:16	6 kph
14/12/2015 14:00	OFF	N22.20244 E113.89439	27 m	0:00:17	6 kph
14/12/2015 14:00	OFF	N22.20256 E113.89419	24 m	0:00:21	4 kph
14/12/2015 14:01	OFF	N22.20259 E113.89385	35 m	0:00:15	8 kph
14/12/2015 14:01	OFF	N22.20230 E113.89359	42 m	0:00:13	12 kph
14/12/2015 14:01	OFF	N22.20179 E113.89362	57 m	0:00:16	13 kph
14/12/2015 14:01	OFF	N22.20128 E113.89390	64 m	0:00:17	14 kph
14/12/2015 14:02	OFF	N22.20080 E113.89414	58 m	0:00:15	14 kph
14/12/2015 14:02	OFF	N22.20039 E113.89435	51 m	0:00:13	14 kph
14/12/2015 14:02	OFF	N22.19978 E113.89461	73 m	0:00:19	14 kph
14/12/2015 14:02	OFF	N22.19926 E113.89483	63 m	0:00:16	14 kph
14/12/2015 14:02	OFF	N22.19922 E113.89485	4 m	0:00:01	14 kph
14/12/2015 14:03	OFF	N22.19882 E113.89506	50 m	0:00:13	14 kph
14/12/2015 14:03	OFF	N22.19851 E113.89543	52 m	0:00:14	13 kph
14/12/2015 14:03	OFF	N22.19814 E113.89602	73 m	0:00:19	14 kph
14/12/2015 14:03	OFF	N22.19791 E113.89647	53 m	0:00:14	14 kph
14/12/2015 14:04	ON	N22.19775 E113.89703	60 m	0:00:16	14 kph
14/12/2015 14:04	ON	N22.19777 E113.89712	9 m	0:00:03	11 kph
14/12/2015 14:04	ON	N22.19805 E113.89731	37 m	0:00:13	10 kph
14/12/2015 14:04	ON	N22.19860 E113.89722	62 m	0:00:18	12 kph
14/12/2015 14:05	ON	N22.19927 E113.89726	74 m	0:00:20	13 kph
14/12/2015 14:05	ON	N22.19988 E113.89726	68 m	0:00:18	14 kph
14/12/2015 14:05	ON	N22.20064 E113.89732	85 m	0:00:23	13 kph
14/12/2015 14:05	ON	N22.20121 E113.89731	63 m	0:00:17	13 kph
14/12/2015 14:06	ON	N22.20191 E113.89727	79 m	0:00:21	13 kph
14/12/2015 14:06	ON	N22.20249 E113.89726	64 m	0:00:17	14 kph
14/12/2015 14:06	ON	N22.20323 E113.89725	83 m	0:00:22	14 kph
14/12/2015 14:07	ON	N22.20394 E113.89726	79 m	0:00:21	14 kph
14/12/2015 14:07	ON	N22.20462 E113.89728	76 m	0:00:20	14 kph
14/12/2015 14:08	ON	N22.20540 E113.89723	87 m	0:00:23	14 kph
14/12/2015 14:08	ON	N22.20626 E113.89720	96 m	0:00:25	14 kph
14/12/2015 14:08	ON	N22.20706 E113.89723	89 m	0:00:23	14 kph
14/12/2015 14:09	ON	N22.20788 E113.89721	92 m	0:00:24	14 kph
14/12/2015 14:09	ON	N22.20859 E113.89723	79 m	0:00:21	13 kph
14/12/2015 14:09	ON	N22.20926 E113.89726	75 m	0:00:20	14 kph
14/12/2015 14:10	ON	N22.20999 E113.89726	81 m	0:00:22	13 kph
14/12/2015 14:10	ON	N22.21082 E113.89724	92 m	0:00:25	13 kph
14/12/2015 14:11	ON	N22.21160 E113.89729	87 m	0:00:24	13 kph
14/12/2015 14:11	ON	N22.21228 E113.89731	76 m	0:00:21	13 kph
14/12/2015 14:11	ON	N22.21304 E113.89723	85 m	0:00:24	13 kph
14/12/2015 14:12	ON	N22.21374 E113.89731	78 m	0:00:22	13 kph
14/12/2015 14:12	ON	N22.21398 E113.89751	34 m	0:00:12	10 kph
14/12/2015 14:12	ON	N22.21385 E113.89786	40 m	0:00:12	12 kph
14/12/2015 14:12	ON	N22.21350 E113.89821	53 m	0:00:13	15 kph
14/12/2015 14:13	ON	N22.21311 E113.89861	60 m	0:00:14	15 kph
14/12/2015 14:13	ON	N22.21266 E113.89911	72 m	0:00:17	15 kph
14/12/2015 14:13	ON	N22.21220 E113.89968	78 m	0:00:18	16 kph
14/12/2015 14:14	ON	N22.21170 E113.90031	86 m	0:00:20	15 kph
14/12/2015 14:14	ON	N22.21131 E113.90082	68 m	0:00:16	15 kph
14/12/2015 14:14	ON	N22.21094 E113.90129	63 m	0:00:15	15 kph
14/12/2015 14:14	ON	N22.21052 E113.90183	73 m	0:00:17	15 kph
14/12/2015 14:15	ON	N22.21007 E113.90239	77 m	0:00:18	15 kph
14/12/2015 14:15	ON	N22.20960 E113.90296	78 m	0:00:18	16 kph
14/12/2015 14:15	ON	N22.20916 E113.90353	77 m	0:00:18	15 kph
14/12/2015 14:15	ON	N22.20876 E113.90403	68 m	0:00:16	15 kph
14/12/2015 14:16	ON	N22.20847 E113.90441	50 m	0:00:12	15 kph
14/12/2015 14:16	ON	N22.20806 E113.90493	70 m	0:00:17	15 kph
14/12/2015 14:16	ON	N22.20769 E113.90545	68 m	0:00:17	14 kph
14/12/2015 14:17	ON	N22.20736 E113.90596	63 m	0:00:16	14 kph
14/12/2015 14:17	ON	N22.20703 E113.90641	60 m	0:00:15	14 kph
14/12/2015 14:17	ON	N22.20668 E113.90686	60 m	0:00:15	14 kph
14/12/2015 14:17	ON	N22.20630 E113.90736	67 m	0:00:17	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 14:18	ON	N22.20588 E113.90776	62 m	0:00:16	14 kph
14/12/2015 14:18	ON	N22.20537 E113.90786	57 m	0:00:15	14 kph
14/12/2015 14:18	ON	N22.20484 E113.90780	60 m	0:00:15	14 kph
14/12/2015 14:18	ON	N22.20430 E113.90780	60 m	0:00:15	15 kph
14/12/2015 14:19	ON	N22.20378 E113.90782	58 m	0:00:14	15 kph
14/12/2015 14:19	ON	N22.20312 E113.90781	73 m	0:00:18	15 kph
14/12/2015 14:19	ON	N22.20260 E113.90784	58 m	0:00:14	15 kph
14/12/2015 14:19	ON	N22.20213 E113.90784	53 m	0:00:13	15 kph
14/12/2015 14:20	ON	N22.20161 E113.90782	57 m	0:00:14	15 kph
14/12/2015 14:20	ON	N22.20110 E113.90783	57 m	0:00:14	15 kph
14/12/2015 14:20	ON	N22.20062 E113.90783	53 m	0:00:13	15 kph
14/12/2015 14:20	ON	N22.20023 E113.90783	44 m	0:00:11	14 kph
14/12/2015 14:20	ON	N22.19972 E113.90784	56 m	0:00:14	14 kph
14/12/2015 14:21	ON	N22.19914 E113.90785	65 m	0:00:16	15 kph
14/12/2015 14:21	ON	N22.19859 E113.90782	61 m	0:00:15	15 kph
14/12/2015 14:21	ON	N22.19794 E113.90782	73 m	0:00:18	15 kph
14/12/2015 14:21	ON	N22.19736 E113.90780	65 m	0:00:16	15 kph
14/12/2015 14:22	ON	N22.19689 E113.90777	52 m	0:00:13	14 kph
14/12/2015 14:22	ON	N22.19645 E113.90776	48 m	0:00:12	15 kph
14/12/2015 14:22	ON	N22.19598 E113.90777	53 m	0:00:13	15 kph
14/12/2015 14:22	ON	N22.19552 E113.90781	52 m	0:00:13	14 kph
14/12/2015 14:23	ON	N22.19496 E113.90783	63 m	0:00:16	14 kph
14/12/2015 14:23	ON	N22.19442 E113.90777	60 m	0:00:15	14 kph
14/12/2015 14:23	ON	N22.19399 E113.90774	48 m	0:00:12	14 kph
14/12/2015 14:23	ON	N22.19345 E113.90772	61 m	0:00:15	15 kph
14/12/2015 14:23	ON	N22.19305 E113.90770	45 m	0:00:11	15 kph
14/12/2015 14:24	ON	N22.19257 E113.90770	53 m	0:00:13	15 kph
14/12/2015 14:24	ON	N22.19202 E113.90769	61 m	0:00:15	15 kph
14/12/2015 14:24	ON	N22.19147 E113.90769	61 m	0:00:15	15 kph
14/12/2015 14:24	ON	N22.19094 E113.90759	60 m	0:00:15	14 kph
14/12/2015 14:25	ON	N22.19051 E113.90739	52 m	0:00:13	14 kph
14/12/2015 14:25	ON	N22.18993 E113.90696	79 m	0:00:20	14 kph
14/12/2015 14:25	ON	N22.18949 E113.90656	64 m	0:00:16	14 kph
14/12/2015 14:26	ON	N22.18901 E113.90606	75 m	0:00:19	14 kph
14/12/2015 14:26	ON	N22.18854 E113.90563	69 m	0:00:18	14 kph
14/12/2015 14:26	ON	N22.18804 E113.90525	68 m	0:00:18	14 kph
14/12/2015 14:27	ON	N22.18740 E113.90484	83 m	0:00:22	14 kph
14/12/2015 14:27	ON	N22.18682 E113.90455	71 m	0:00:19	13 kph
14/12/2015 14:27	ON	N22.18623 E113.90437	68 m	0:00:18	14 kph
14/12/2015 14:27	ON	N22.18567 E113.90423	65 m	0:00:17	14 kph
14/12/2015 14:28	ON	N22.18517 E113.90412	57 m	0:00:15	14 kph
14/12/2015 14:28	ON	N22.18454 E113.90402	71 m	0:00:19	14 kph
14/12/2015 14:29	ON	N22.18182 E113.90354	307 m	0:01:15	15 kph
14/12/2015 14:30	ON	N22.18124 E113.90361	65 m	0:00:15	16 kph
14/12/2015 14:30	ON	N22.18084 E113.90375	47 m	0:00:18	9 kph
14/12/2015 14:30	ON	N22.18025 E113.90386	66 m	0:00:17	14 kph
14/12/2015 14:30	ON	N22.17967 E113.90402	68 m	0:00:17	14 kph
14/12/2015 14:31	ON	N22.17913 E113.90424	64 m	0:00:16	14 kph
14/12/2015 14:31	ON	N22.17863 E113.90450	61 m	0:00:15	15 kph
14/12/2015 14:31	ON	N22.17822 E113.90474	52 m	0:00:13	14 kph
14/12/2015 14:31	ON	N22.17772 E113.90512	68 m	0:00:17	14 kph
14/12/2015 14:32	ON	N22.17730 E113.90550	61 m	0:00:15	15 kph
14/12/2015 14:32	ON	N22.17678 E113.90604	80 m	0:00:20	14 kph
14/12/2015 14:32	ON	N22.17632 E113.90648	68 m	0:00:17	14 kph
14/12/2015 14:33	ON	N22.17580 E113.90697	77 m	0:00:19	15 kph
14/12/2015 14:33	ON	N22.17535 E113.90737	65 m	0:00:16	15 kph
14/12/2015 14:33	ON	N22.17492 E113.90779	64 m	0:00:16	15 kph
14/12/2015 14:33	ON	N22.17449 E113.90820	64 m	0:00:16	15 kph
14/12/2015 14:34	ON	N22.17381 E113.90861	86 m	0:00:21	15 kph
14/12/2015 14:34	ON	N22.17317 E113.90868	71 m	0:00:18	14 kph
14/12/2015 14:34	ON	N22.17265 E113.90858	59 m	0:00:15	14 kph
14/12/2015 14:35	ON	N22.17204 E113.90830	74 m	0:00:19	14 kph
14/12/2015 14:35	ON	N22.17148 E113.90787	76 m	0:00:20	14 kph
14/12/2015 14:35	ON	N22.17102 E113.90742	69 m	0:00:18	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 14:36	ON	N22.17043 E113.90688	86 m	0:00:22	14 kph
14/12/2015 14:36	ON	N22.16991 E113.90643	74 m	0:00:19	14 kph
14/12/2015 14:36	ON	N22.16938 E113.90599	74 m	0:00:19	14 kph
14/12/2015 14:37	ON	N22.16878 E113.90545	87 m	0:00:22	14 kph
14/12/2015 14:37	ON	N22.16817 E113.90492	87 m	0:00:22	14 kph
14/12/2015 14:37	ON	N22.16771 E113.90442	73 m	0:00:19	14 kph
14/12/2015 14:38	ON	N22.16729 E113.90390	71 m	0:00:18	14 kph
14/12/2015 14:38	ON	N22.16681 E113.90323	87 m	0:00:22	14 kph
14/12/2015 14:38	ON	N22.16633 E113.90248	94 m	0:00:24	14 kph
14/12/2015 14:39	ON	N22.16587 E113.90188	81 m	0:00:21	14 kph
14/12/2015 14:39	ON	N22.16539 E113.90132	79 m	0:00:20	14 kph
14/12/2015 14:39	ON	N22.16502 E113.90091	58 m	0:00:15	14 kph
14/12/2015 14:40	ON	N22.16457 E113.90035	77 m	0:00:20	14 kph
14/12/2015 14:40	ON	N22.16416 E113.89987	67 m	0:00:17	14 kph
14/12/2015 14:40	ON	N22.16370 E113.89938	72 m	0:00:18	14 kph
14/12/2015 14:40	ON	N22.16323 E113.89902	65 m	0:00:16	15 kph
14/12/2015 14:41	ON	N22.16263 E113.89865	77 m	0:00:19	15 kph
14/12/2015 14:41	ON	N22.16225 E113.89844	48 m	0:00:12	14 kph
14/12/2015 14:41	ON	N22.16192 E113.89831	39 m	0:00:10	14 kph
14/12/2015 14:41	ON	N22.16144 E113.89811	57 m	0:00:14	15 kph
14/12/2015 14:42	ON	N22.16098 E113.89795	54 m	0:00:13	15 kph
14/12/2015 14:42	ON	N22.16050 E113.89783	55 m	0:00:13	15 kph
14/12/2015 14:42	ON	N22.15998 E113.89781	58 m	0:00:14	15 kph
14/12/2015 14:42	ON	N22.15947 E113.89790	58 m	0:00:14	15 kph
14/12/2015 14:43	ON	N22.15885 E113.89813	73 m	0:00:18	15 kph
14/12/2015 14:43	ON	N22.15850 E113.89834	45 m	0:00:11	15 kph
14/12/2015 14:43	ON	N22.15812 E113.89864	52 m	0:00:13	14 kph
14/12/2015 14:43	ON	N22.15773 E113.89899	56 m	0:00:14	15 kph
14/12/2015 14:43	ON	N22.15737 E113.89934	53 m	0:00:14	14 kph
14/12/2015 14:44	ON	N22.15716 E113.89956	32 m	0:00:13	9 kph
14/12/2015 14:44	OFF	N22.15702 E113.89973	24 m	0:00:13	7 kph
14/12/2015 14:44	OFF	N22.15696 E113.89980	10 m	0:00:07	5 kph
14/12/2015 14:44	OFF	N22.15692 E113.89984	6 m	0:00:05	5 kph
14/12/2015 14:44	OFF	N22.15681 E113.90000	20 m	0:00:18	4 kph
14/12/2015 14:45	OFF	N22.15675 E113.90009	11 m	0:00:12	3 kph
14/12/2015 14:45	OFF	N22.15671 E113.90018	10 m	0:00:12	3 kph
14/12/2015 14:45	OFF	N22.15667 E113.90025	9 m	0:00:12	3 kph
14/12/2015 14:45	OFF	N22.15663 E113.90033	9 m	0:00:12	3 kph
14/12/2015 14:45	OFF	N22.15650 E113.90063	34 m	0:00:15	8 kph
14/12/2015 14:45	ON	N22.15647 E113.90068	7 m	0:00:02	12 kph
14/12/2015 14:46	ON	N22.15619 E113.90109	52 m	0:00:14	13 kph
14/12/2015 14:46	ON	N22.15594 E113.90146	48 m	0:00:12	14 kph
14/12/2015 14:46	ON	N22.15566 E113.90192	57 m	0:00:14	15 kph
14/12/2015 14:46	ON	N22.15547 E113.90233	47 m	0:00:12	14 kph
14/12/2015 14:47	ON	N22.15534 E113.90289	59 m	0:00:15	14 kph
14/12/2015 14:47	ON	N22.15533 E113.90351	63 m	0:00:16	14 kph
14/12/2015 14:47	ON	N22.15540 E113.90414	66 m	0:00:16	15 kph
14/12/2015 14:47	ON	N22.15556 E113.90475	66 m	0:00:16	15 kph
14/12/2015 14:48	ON	N22.15564 E113.90538	65 m	0:00:16	15 kph
14/12/2015 14:48	ON	N22.15566 E113.90593	57 m	0:00:14	15 kph
14/12/2015 14:48	ON	N22.15564 E113.90668	78 m	0:00:19	15 kph
14/12/2015 14:49	ON	N22.15558 E113.90743	77 m	0:00:19	15 kph
14/12/2015 14:49	ON	N22.15536 E113.90780	46 m	0:00:13	13 kph
14/12/2015 14:49	ON	N22.15496 E113.90782	44 m	0:00:13	12 kph
14/12/2015 14:49	ON	N22.15447 E113.90770	56 m	0:00:15	13 kph
14/12/2015 14:49	ON	N22.15406 E113.90771	46 m	0:00:12	14 kph
14/12/2015 14:50	ON	N22.15361 E113.90774	50 m	0:00:13	14 kph
14/12/2015 14:50	ON	N22.15322 E113.90775	43 m	0:00:11	14 kph
14/12/2015 14:50	ON	N22.15288 E113.90772	38 m	0:00:10	14 kph
14/12/2015 14:50	ON	N22.15245 E113.90769	48 m	0:00:12	14 kph
14/12/2015 14:50	ON	N22.15203 E113.90765	47 m	0:00:12	14 kph
14/12/2015 14:51	ON	N22.15157 E113.90763	51 m	0:00:13	14 kph
14/12/2015 14:51	ON	N22.15107 E113.90769	56 m	0:00:14	14 kph
14/12/2015 14:51	ON	N22.15061 E113.90777	52 m	0:00:13	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 14:51	ON	N22.15011 E113.90779	56 m	0:00:14	14 kph
14/12/2015 14:51	ON	N22.14976 E113.90779	40 m	0:00:10	14 kph
14/12/2015 14:52	ON	N22.14944 E113.90780	35 m	0:00:09	14 kph
14/12/2015 14:52	ON	N22.14913 E113.90784	35 m	0:00:09	14 kph
14/12/2015 14:52	ON	N22.14883 E113.90789	35 m	0:00:09	14 kph
14/12/2015 14:52	ON	N22.14834 E113.90795	55 m	0:00:14	14 kph
14/12/2015 14:52	ON	N22.14788 E113.90796	51 m	0:00:13	14 kph
14/12/2015 14:53	ON	N22.14743 E113.90799	51 m	0:00:13	14 kph
14/12/2015 14:53	ON	N22.14705 E113.90802	43 m	0:00:11	14 kph
14/12/2015 14:53	ON	N22.14650 E113.90810	62 m	0:00:16	14 kph
14/12/2015 14:53	ON	N22.14601 E113.90820	55 m	0:00:14	14 kph
14/12/2015 14:53	ON	N22.14581 E113.90820	23 m	0:00:06	14 kph
14/12/2015 14:53	ON	N22.14548 E113.90811	38 m	0:00:10	14 kph
14/12/2015 14:54	ON	N22.14512 E113.90788	47 m	0:00:12	14 kph
14/12/2015 14:54	ON	N22.14476 E113.90774	43 m	0:00:11	14 kph
14/12/2015 14:54	ON	N22.14423 E113.90775	58 m	0:00:15	14 kph
14/12/2015 14:54	ON	N22.14382 E113.90776	46 m	0:00:12	14 kph
14/12/2015 14:54	ON	N22.14348 E113.90773	38 m	0:00:10	14 kph
14/12/2015 14:55	ON	N22.14293 E113.90772	62 m	0:00:16	14 kph
14/12/2015 14:55	ON	N22.14245 E113.90782	54 m	0:00:14	14 kph
14/12/2015 14:55	ON	N22.14224 E113.90810	37 m	0:00:11	12 kph
14/12/2015 14:55	ON	N22.14220 E113.90867	58 m	0:00:15	14 kph
14/12/2015 14:56	ON	N22.14222 E113.90924	59 m	0:00:14	15 kph
14/12/2015 14:56	ON	N22.14225 E113.90982	60 m	0:00:14	15 kph
14/12/2015 14:56	ON	N22.14227 E113.91014	33 m	0:00:08	15 kph
14/12/2015 14:56	ON	N22.14229 E113.91075	63 m	0:00:15	15 kph
14/12/2015 14:56	ON	N22.14230 E113.91127	54 m	0:00:13	15 kph
14/12/2015 14:57	ON	N22.14230 E113.91192	66 m	0:00:16	15 kph
14/12/2015 14:57	ON	N22.14232 E113.91257	67 m	0:00:16	15 kph
14/12/2015 14:57	ON	N22.14233 E113.91321	67 m	0:00:16	15 kph
14/12/2015 14:58	ON	N22.14235 E113.91378	59 m	0:00:15	14 kph
14/12/2015 14:58	ON	N22.14236 E113.91421	44 m	0:00:12	13 kph
14/12/2015 14:58	ON	N22.14233 E113.91478	59 m	0:00:16	13 kph
14/12/2015 14:58	ON	N22.14230 E113.91533	57 m	0:00:15	14 kph
14/12/2015 14:58	ON	N22.14228 E113.91581	49 m	0:00:13	13 kph
14/12/2015 14:59	ON	N22.14225 E113.91636	57 m	0:00:15	14 kph
14/12/2015 14:59	ON	N22.14224 E113.91691	57 m	0:00:15	14 kph
14/12/2015 14:59	ON	N22.14222 E113.91743	54 m	0:00:14	14 kph
14/12/2015 14:59	ON	N22.14240 E113.91772	36 m	0:00:12	11 kph
14/12/2015 15:00	ON	N22.14267 E113.91778	31 m	0:00:10	11 kph
14/12/2015 15:00	ON	N22.14304 E113.91777	41 m	0:00:12	12 kph
14/12/2015 15:00	ON	N22.14339 E113.91779	39 m	0:00:11	13 kph
14/12/2015 15:00	ON	N22.14383 E113.91784	49 m	0:00:14	13 kph
14/12/2015 15:00	ON	N22.14422 E113.91786	43 m	0:00:12	13 kph
14/12/2015 15:01	ON	N22.14454 E113.91789	36 m	0:00:10	13 kph
14/12/2015 15:01	ON	N22.14488 E113.91796	39 m	0:00:11	13 kph
14/12/2015 15:01	ON	N22.14524 E113.91798	39 m	0:00:11	13 kph
14/12/2015 15:01	ON	N22.14565 E113.91795	46 m	0:00:13	13 kph
14/12/2015 15:01	ON	N22.14610 E113.91791	50 m	0:00:14	13 kph
14/12/2015 15:02	ON	N22.14648 E113.91790	42 m	0:00:12	13 kph
14/12/2015 15:02	ON	N22.14686 E113.91788	43 m	0:00:12	13 kph
14/12/2015 15:02	ON	N22.14721 E113.91786	39 m	0:00:11	13 kph
14/12/2015 15:02	ON	N22.14772 E113.91784	57 m	0:00:16	13 kph
14/12/2015 15:02	ON	N22.14817 E113.91784	51 m	0:00:14	13 kph
14/12/2015 15:03	ON	N22.14861 E113.91787	49 m	0:00:14	13 kph
14/12/2015 15:03	ON	N22.14902 E113.91788	46 m	0:00:13	13 kph
14/12/2015 15:03	ON	N22.14953 E113.91785	57 m	0:00:16	13 kph
14/12/2015 15:03	ON	N22.14997 E113.91784	49 m	0:00:14	13 kph
14/12/2015 15:04	ON	N22.15041 E113.91783	49 m	0:00:14	13 kph
14/12/2015 15:04	ON	N22.15082 E113.91783	45 m	0:00:13	13 kph
14/12/2015 15:04	ON	N22.15126 E113.91786	49 m	0:00:14	13 kph
14/12/2015 15:04	ON	N22.15180 E113.91786	60 m	0:00:17	13 kph
14/12/2015 15:05	ON	N22.15235 E113.91790	61 m	0:00:17	13 kph
14/12/2015 15:05	ON	N22.15283 E113.91792	53 m	0:00:15	13 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 15:05	ON	N22.15338 E113.91792	62 m	0:00:17	13 kph
14/12/2015 15:05	ON	N22.15390 E113.91795	57 m	0:00:16	13 kph
14/12/2015 15:06	ON	N22.15438 E113.91794	54 m	0:00:15	13 kph
14/12/2015 15:06	ON	N22.15492 E113.91789	60 m	0:00:17	13 kph
14/12/2015 15:06	ON	N22.15552 E113.91791	67 m	0:00:18	13 kph
14/12/2015 15:07	ON	N22.15614 E113.91789	69 m	0:00:19	13 kph
14/12/2015 15:07	ON	N22.15671 E113.91785	63 m	0:00:17	13 kph
14/12/2015 15:07	ON	N22.15735 E113.91785	71 m	0:00:19	13 kph
14/12/2015 15:08	ON	N22.15795 E113.91789	67 m	0:00:18	13 kph
14/12/2015 15:08	ON	N22.15856 E113.91793	69 m	0:00:18	14 kph
14/12/2015 15:08	ON	N22.15914 E113.91795	64 m	0:00:17	14 kph
14/12/2015 15:08	ON	N22.15975 E113.91798	68 m	0:00:18	14 kph
14/12/2015 15:09	ON	N22.16025 E113.91802	56 m	0:00:15	13 kph
14/12/2015 15:09	ON	N22.16084 E113.91810	65 m	0:00:17	14 kph
14/12/2015 15:09	ON	N22.16130 E113.91820	53 m	0:00:14	14 kph
14/12/2015 15:09	ON	N22.16198 E113.91837	77 m	0:00:20	14 kph
14/12/2015 15:10	ON	N22.16261 E113.91852	72 m	0:00:19	14 kph
14/12/2015 15:10	ON	N22.16300 E113.91861	45 m	0:00:12	13 kph
14/12/2015 15:10	ON	N22.16338 E113.91870	44 m	0:00:12	13 kph
14/12/2015 15:10	ON	N22.16387 E113.91883	55 m	0:00:15	13 kph
14/12/2015 15:11	ON	N22.16443 E113.91893	63 m	0:00:17	13 kph
14/12/2015 15:11	ON	N22.16502 E113.91904	68 m	0:00:18	14 kph
14/12/2015 15:11	ON	N22.16565 E113.91916	71 m	0:00:19	13 kph
14/12/2015 15:12	ON	N22.16622 E113.91929	64 m	0:00:17	14 kph
14/12/2015 15:12	ON	N22.16684 E113.91946	72 m	0:00:19	14 kph
14/12/2015 15:12	ON	N22.16732 E113.91960	55 m	0:00:15	13 kph
14/12/2015 15:12	ON	N22.16778 E113.91972	53 m	0:00:15	13 kph
14/12/2015 15:13	ON	N22.16822 E113.91982	50 m	0:00:14	13 kph
14/12/2015 15:13	ON	N22.16870 E113.91990	54 m	0:00:15	13 kph
14/12/2015 15:13	ON	N22.16912 E113.91997	48 m	0:00:13	13 kph
14/12/2015 15:13	ON	N22.16965 E113.92006	59 m	0:00:16	13 kph
14/12/2015 15:14	ON	N22.17020 E113.92020	64 m	0:00:17	13 kph
14/12/2015 15:14	ON	N22.17059 E113.92031	45 m	0:00:12	14 kph
14/12/2015 15:14	ON	N22.17116 E113.92046	65 m	0:00:18	13 kph
14/12/2015 15:14	ON	N22.17165 E113.92057	55 m	0:00:15	13 kph
14/12/2015 15:15	ON	N22.17223 E113.92068	66 m	0:00:18	13 kph
14/12/2015 15:15	ON	N22.17291 E113.92080	77 m	0:00:21	13 kph
14/12/2015 15:15	ON	N22.17336 E113.92089	51 m	0:00:14	13 kph
14/12/2015 15:16	ON	N22.17388 E113.92100	58 m	0:00:16	13 kph
14/12/2015 15:16	ON	N22.17430 E113.92108	48 m	0:00:13	13 kph
14/12/2015 15:16	ON	N22.17476 E113.92117	52 m	0:00:14	13 kph
14/12/2015 15:16	ON	N22.17531 E113.92129	62 m	0:00:17	13 kph
14/12/2015 15:17	ON	N22.17577 E113.92140	52 m	0:00:14	13 kph
14/12/2015 15:17	ON	N22.17622 E113.92150	52 m	0:00:14	13 kph
14/12/2015 15:17	ON	N22.17676 E113.92161	61 m	0:00:16	14 kph
14/12/2015 15:17	ON	N22.17740 E113.92172	72 m	0:00:19	14 kph
14/12/2015 15:18	ON	N22.17801 E113.92182	69 m	0:00:18	14 kph
14/12/2015 15:18	ON	N22.17865 E113.92192	72 m	0:00:19	14 kph
14/12/2015 15:18	ON	N22.17932 E113.92199	74 m	0:00:20	13 kph
14/12/2015 15:19	ON	N22.17991 E113.92200	67 m	0:00:18	13 kph
14/12/2015 15:19	ON	N22.18044 E113.92192	59 m	0:00:16	13 kph
14/12/2015 15:19	ON	N22.18104 E113.92167	72 m	0:00:20	13 kph
14/12/2015 15:20	ON	N22.18150 E113.92141	58 m	0:00:16	13 kph
14/12/2015 15:20	ON	N22.18203 E113.92105	69 m	0:00:19	13 kph
14/12/2015 15:20	ON	N22.18258 E113.92068	72 m	0:00:20	13 kph
14/12/2015 15:20	ON	N22.18299 E113.92034	57 m	0:00:16	13 kph
14/12/2015 15:21	ON	N22.18342 E113.91991	66 m	0:00:18	13 kph
14/12/2015 15:21	ON	N22.18387 E113.91935	76 m	0:00:21	13 kph
14/12/2015 15:21	ON	N22.18422 E113.91889	62 m	0:00:17	13 kph
14/12/2015 15:22	ON	N22.18450 E113.91846	54 m	0:00:15	13 kph
14/12/2015 15:22	ON	N22.18497 E113.91805	68 m	0:00:20	12 kph
14/12/2015 15:22	ON	N22.18553 E113.91806	62 m	0:00:17	13 kph
14/12/2015 15:23	ON	N22.18620 E113.91791	76 m	0:00:21	13 kph
14/12/2015 15:23	ON	N22.18671 E113.91782	58 m	0:00:16	13 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 15:23	ON	N22.18732 E113.91788	68 m	0:00:19	13 kph
14/12/2015 15:23	ON	N22.18787 E113.91787	61 m	0:00:17	13 kph
14/12/2015 15:24	ON	N22.18846 E113.91788	67 m	0:00:18	13 kph
14/12/2015 15:24	ON	N22.18906 E113.91781	66 m	0:00:18	13 kph
14/12/2015 15:24	ON	N22.18961 E113.91775	62 m	0:00:17	13 kph
14/12/2015 15:25	ON	N22.19020 E113.91777	65 m	0:00:18	13 kph
14/12/2015 15:25	ON	N22.19072 E113.91783	59 m	0:00:16	13 kph
14/12/2015 15:25	ON	N22.19131 E113.91783	65 m	0:00:18	13 kph
14/12/2015 15:25	ON	N22.19186 E113.91779	61 m	0:00:17	13 kph
14/12/2015 15:26	ON	N22.19242 E113.91783	62 m	0:00:17	13 kph
14/12/2015 15:26	ON	N22.19292 E113.91795	57 m	0:00:16	13 kph
14/12/2015 15:26	ON	N22.19350 E113.91793	65 m	0:00:18	13 kph
14/12/2015 15:27	ON	N22.19398 E113.91788	54 m	0:00:15	13 kph
14/12/2015 15:27	ON	N22.19465 E113.91792	74 m	0:00:20	13 kph
14/12/2015 15:27	ON	N22.19534 E113.91785	78 m	0:00:21	13 kph
14/12/2015 15:28	ON	N22.19596 E113.91786	69 m	0:00:19	13 kph
14/12/2015 15:28	ON	N22.19652 E113.91791	62 m	0:00:17	13 kph
14/12/2015 15:28	ON	N22.19722 E113.91790	78 m	0:00:21	13 kph
14/12/2015 15:29	ON	N22.19782 E113.91791	67 m	0:00:18	13 kph
14/12/2015 15:29	ON	N22.19838 E113.91791	63 m	0:00:17	13 kph
14/12/2015 15:29	ON	N22.19892 E113.91787	60 m	0:00:16	14 kph
14/12/2015 15:29	ON	N22.19948 E113.91780	63 m	0:00:17	13 kph
14/12/2015 15:30	ON	N22.20007 E113.91782	66 m	0:00:18	13 kph
14/12/2015 15:30	ON	N22.20056 E113.91781	54 m	0:00:15	13 kph
14/12/2015 15:30	ON	N22.20116 E113.91784	67 m	0:00:18	13 kph
14/12/2015 15:31	ON	N22.20189 E113.91788	81 m	0:00:22	13 kph
14/12/2015 15:31	ON	N22.20237 E113.91784	55 m	0:00:15	13 kph
14/12/2015 15:31	ON	N22.20306 E113.91778	77 m	0:00:21	13 kph
14/12/2015 15:31	ON	N22.20372 E113.91778	74 m	0:00:20	13 kph
14/12/2015 15:32	ON	N22.20442 E113.91779	77 m	0:00:21	13 kph
14/12/2015 15:32	ON	N22.20498 E113.91795	65 m	0:00:18	13 kph
14/12/2015 15:32	ON	N22.20526 E113.91839	54 m	0:00:15	13 kph
14/12/2015 15:33	ON	N22.20538 E113.91898	62 m	0:00:16	14 kph
14/12/2015 15:33	ON	N22.20544 E113.91958	63 m	0:00:16	14 kph
14/12/2015 15:33	ON	N22.20549 E113.92016	60 m	0:00:15	14 kph
14/12/2015 15:33	ON	N22.20551 E113.92061	47 m	0:00:12	14 kph
14/12/2015 15:34	ON	N22.20551 E113.92115	55 m	0:00:14	14 kph
14/12/2015 15:34	ON	N22.20547 E113.92164	52 m	0:00:13	14 kph
14/12/2015 15:34	ON	N22.20545 E113.92237	75 m	0:00:19	14 kph
14/12/2015 15:34	ON	N22.20550 E113.92303	68 m	0:00:17	14 kph
14/12/2015 15:35	ON	N22.20552 E113.92354	52 m	0:00:13	14 kph
14/12/2015 15:35	ON	N22.20551 E113.92421	69 m	0:00:17	15 kph
14/12/2015 15:35	ON	N22.20548 E113.92488	70 m	0:00:17	15 kph
14/12/2015 15:36	ON	N22.20547 E113.92566	81 m	0:00:20	14 kph
14/12/2015 15:36	ON	N22.20548 E113.92625	61 m	0:00:15	15 kph
14/12/2015 15:36	ON	N22.20548 E113.92696	73 m	0:00:18	15 kph
14/12/2015 15:36	ON	N22.20539 E113.92737	44 m	0:00:12	13 kph
14/12/2015 15:37	ON	N22.20503 E113.92751	43 m	0:00:13	12 kph
14/12/2015 15:37	ON	N22.20448 E113.92749	61 m	0:00:16	14 kph
14/12/2015 15:37	ON	N22.20393 E113.92754	61 m	0:00:16	14 kph
14/12/2015 15:37	ON	N22.20345 E113.92759	54 m	0:00:14	14 kph
14/12/2015 15:37	ON	N22.20303 E113.92758	46 m	0:00:12	14 kph
14/12/2015 15:38	ON	N22.20250 E113.92759	59 m	0:00:15	14 kph
14/12/2015 15:38	ON	N22.20205 E113.92765	51 m	0:00:13	14 kph
14/12/2015 15:38	ON	N22.20148 E113.92765	63 m	0:00:16	14 kph
14/12/2015 15:38	ON	N22.20100 E113.92764	54 m	0:00:14	14 kph
14/12/2015 15:39	ON	N22.20044 E113.92763	62 m	0:00:16	14 kph
14/12/2015 15:39	ON	N22.19992 E113.92764	59 m	0:00:15	14 kph
14/12/2015 15:39	ON	N22.19942 E113.92764	55 m	0:00:14	14 kph
14/12/2015 15:39	ON	N22.19890 E113.92758	59 m	0:00:15	14 kph
14/12/2015 15:40	ON	N22.19841 E113.92752	55 m	0:00:14	14 kph
14/12/2015 15:40	ON	N22.19793 E113.92752	54 m	0:00:14	14 kph
14/12/2015 15:40	ON	N22.19751 E113.92754	46 m	0:00:12	14 kph
14/12/2015 15:40	ON	N22.19702 E113.92756	55 m	0:00:14	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 15:41	ON	N22.19653 E113.92757	54 m	0:00:14	14 kph
14/12/2015 15:41	ON	N22.19580 E113.92753	82 m	0:00:21	14 kph
14/12/2015 15:41	ON	N22.19524 E113.92751	63 m	0:00:16	14 kph
14/12/2015 15:41	ON	N22.19467 E113.92752	63 m	0:00:16	14 kph
14/12/2015 15:42	ON	N22.19417 E113.92749	55 m	0:00:14	14 kph
14/12/2015 15:42	ON	N22.19369 E113.92748	54 m	0:00:14	14 kph
14/12/2015 15:42	ON	N22.19330 E113.92751	43 m	0:00:11	14 kph
14/12/2015 15:42	ON	N22.19281 E113.92756	55 m	0:00:14	14 kph
14/12/2015 15:43	ON	N22.19232 E113.92758	55 m	0:00:14	14 kph
14/12/2015 15:43	ON	N22.19175 E113.92754	63 m	0:00:16	14 kph
14/12/2015 15:43	ON	N22.19129 E113.92750	51 m	0:00:13	14 kph
14/12/2015 15:43	ON	N22.19084 E113.92750	50 m	0:00:13	14 kph
14/12/2015 15:43	ON	N22.19038 E113.92756	51 m	0:00:13	14 kph
14/12/2015 15:44	ON	N22.18977 E113.92769	69 m	0:00:17	15 kph
14/12/2015 15:44	ON	N22.18924 E113.92772	59 m	0:00:15	14 kph
14/12/2015 15:44	ON	N22.18875 E113.92766	55 m	0:00:14	14 kph
14/12/2015 15:44	ON	N22.18831 E113.92756	51 m	0:00:13	14 kph
14/12/2015 15:45	ON	N22.18786 E113.92748	51 m	0:00:13	14 kph
14/12/2015 15:45	ON	N22.18730 E113.92738	63 m	0:00:16	14 kph
14/12/2015 15:45	ON	N22.18681 E113.92734	54 m	0:00:14	14 kph
14/12/2015 15:45	ON	N22.18636 E113.92738	51 m	0:00:13	14 kph
14/12/2015 15:46	ON	N22.18583 E113.92742	59 m	0:00:15	14 kph
14/12/2015 15:46	ON	N22.18540 E113.92745	48 m	0:00:12	14 kph
14/12/2015 15:46	ON	N22.18484 E113.92744	63 m	0:00:16	14 kph
14/12/2015 15:46	ON	N22.18430 E113.92743	59 m	0:00:15	14 kph
14/12/2015 15:47	ON	N22.18374 E113.92747	63 m	0:00:16	14 kph
14/12/2015 15:47	ON	N22.18314 E113.92752	67 m	0:00:17	14 kph
14/12/2015 15:47	ON	N22.18268 E113.92753	51 m	0:00:13	14 kph
14/12/2015 15:47	ON	N22.18222 E113.92753	51 m	0:00:13	14 kph
14/12/2015 15:48	ON	N22.18162 E113.92756	67 m	0:00:17	14 kph
14/12/2015 15:48	ON	N22.18108 E113.92763	61 m	0:00:15	15 kph
14/12/2015 15:48	ON	N22.18054 E113.92773	60 m	0:00:15	14 kph
14/12/2015 15:48	ON	N22.18012 E113.92774	47 m	0:00:12	14 kph
14/12/2015 15:49	ON	N22.17961 E113.92772	56 m	0:00:14	14 kph
14/12/2015 15:49	ON	N22.17926 E113.92767	39 m	0:00:10	14 kph
14/12/2015 15:49	ON	N22.17883 E113.92763	48 m	0:00:12	14 kph
14/12/2015 15:49	ON	N22.17845 E113.92762	43 m	0:00:11	14 kph
14/12/2015 15:49	ON	N22.17800 E113.92763	50 m	0:00:13	14 kph
14/12/2015 15:50	ON	N22.17746 E113.92756	60 m	0:00:15	14 kph
14/12/2015 15:50	ON	N22.17704 E113.92748	47 m	0:00:12	14 kph
14/12/2015 15:50	ON	N22.17649 E113.92743	62 m	0:00:16	14 kph
14/12/2015 15:50	ON	N22.17601 E113.92747	54 m	0:00:14	14 kph
14/12/2015 15:50	ON	N22.17567 E113.92751	38 m	0:00:10	14 kph
14/12/2015 15:51	ON	N22.17515 E113.92755	58 m	0:00:15	14 kph
14/12/2015 15:51	ON	N22.17459 E113.92756	63 m	0:00:16	14 kph
14/12/2015 15:51	ON	N22.17413 E113.92753	51 m	0:00:13	14 kph
14/12/2015 15:51	ON	N22.17352 E113.92747	68 m	0:00:17	14 kph
14/12/2015 15:52	ON	N22.17302 E113.92743	55 m	0:00:14	14 kph
14/12/2015 15:52	ON	N22.17249 E113.92743	59 m	0:00:15	14 kph
14/12/2015 15:52	ON	N22.17195 E113.92747	60 m	0:00:15	14 kph
14/12/2015 15:52	ON	N22.17153 E113.92751	47 m	0:00:12	14 kph
14/12/2015 15:53	ON	N22.17106 E113.92751	52 m	0:00:13	14 kph
14/12/2015 15:53	ON	N22.17042 E113.92748	72 m	0:00:18	14 kph
14/12/2015 15:53	ON	N22.16999 E113.92746	47 m	0:00:12	14 kph
14/12/2015 15:53	ON	N22.16954 E113.92747	51 m	0:00:13	14 kph
14/12/2015 15:54	ON	N22.16893 E113.92750	68 m	0:00:17	14 kph
14/12/2015 15:54	ON	N22.16836 E113.92755	64 m	0:00:16	14 kph
14/12/2015 15:54	ON	N22.16796 E113.92757	44 m	0:00:11	14 kph
14/12/2015 15:54	ON	N22.16746 E113.92758	56 m	0:00:14	14 kph
14/12/2015 15:55	ON	N22.16697 E113.92756	55 m	0:00:14	14 kph
14/12/2015 15:55	ON	N22.16643 E113.92752	60 m	0:00:15	14 kph
14/12/2015 15:55	ON	N22.16594 E113.92755	54 m	0:00:14	14 kph
14/12/2015 15:55	ON	N22.16541 E113.92762	60 m	0:00:15	14 kph
14/12/2015 15:55	ON	N22.16495 E113.92761	51 m	0:00:13	14 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 15:56	ON	N22.16432 E113.92750	71 m	0:00:18	14 kph
14/12/2015 15:56	ON	N22.16387 E113.92741	51 m	0:00:13	14 kph
14/12/2015 15:56	ON	N22.16330 E113.92735	64 m	0:00:16	14 kph
14/12/2015 15:56	ON	N22.16283 E113.92735	53 m	0:00:13	15 kph
14/12/2015 15:57	ON	N22.16233 E113.92741	56 m	0:00:14	14 kph
14/12/2015 15:57	ON	N22.16179 E113.92746	60 m	0:00:15	15 kph
14/12/2015 15:57	ON	N22.16133 E113.92741	52 m	0:00:13	14 kph
14/12/2015 15:57	ON	N22.16083 E113.92738	55 m	0:00:14	14 kph
14/12/2015 15:58	ON	N22.16041 E113.92744	47 m	0:00:12	14 kph
14/12/2015 15:58	ON	N22.16003 E113.92755	44 m	0:00:11	14 kph
14/12/2015 15:58	ON	N22.15959 E113.92770	51 m	0:00:13	14 kph
14/12/2015 15:58	ON	N22.15906 E113.92776	59 m	0:00:15	14 kph
14/12/2015 15:58	ON	N22.15860 E113.92768	51 m	0:00:13	14 kph
14/12/2015 15:59	ON	N22.15807 E113.92760	60 m	0:00:15	14 kph
14/12/2015 15:59	ON	N22.15757 E113.92756	55 m	0:00:14	14 kph
14/12/2015 15:59	ON	N22.15708 E113.92750	55 m	0:00:14	14 kph
14/12/2015 15:59	ON	N22.15655 E113.92753	59 m	0:00:15	14 kph
14/12/2015 16:00	ON	N22.15605 E113.92759	56 m	0:00:14	14 kph
14/12/2015 16:00	ON	N22.15541 E113.92753	72 m	0:00:18	14 kph
14/12/2015 16:00	ON	N22.15506 E113.92749	39 m	0:00:10	14 kph
14/12/2015 16:00	ON	N22.15459 E113.92749	52 m	0:00:13	14 kph
14/12/2015 16:01	ON	N22.15406 E113.92756	60 m	0:00:15	14 kph
14/12/2015 16:01	ON	N22.15349 E113.92761	64 m	0:00:16	14 kph
14/12/2015 16:01	ON	N22.15303 E113.92763	52 m	0:00:13	14 kph
14/12/2015 16:01	ON	N22.15254 E113.92758	55 m	0:00:14	14 kph
14/12/2015 16:02	ON	N22.15201 E113.92755	59 m	0:00:15	14 kph
14/12/2015 16:02	ON	N22.15152 E113.92757	55 m	0:00:14	14 kph
14/12/2015 16:02	ON	N22.15110 E113.92758	47 m	0:00:12	14 kph
14/12/2015 16:02	ON	N22.15057 E113.92760	59 m	0:00:15	14 kph
14/12/2015 16:02	ON	N22.15011 E113.92763	51 m	0:00:13	14 kph
14/12/2015 16:03	ON	N22.14965 E113.92763	52 m	0:00:13	14 kph
14/12/2015 16:03	ON	N22.14923 E113.92759	47 m	0:00:12	14 kph
14/12/2015 16:03	ON	N22.14888 E113.92755	39 m	0:00:10	14 kph
14/12/2015 16:03	ON	N22.14846 E113.92756	47 m	0:00:12	14 kph
14/12/2015 16:03	ON	N22.14801 E113.92760	50 m	0:00:13	14 kph
14/12/2015 16:04	ON	N22.14762 E113.92763	43 m	0:00:11	14 kph
14/12/2015 16:04	ON	N22.14716 E113.92767	52 m	0:00:13	14 kph
14/12/2015 16:04	ON	N22.14670 E113.92768	51 m	0:00:13	14 kph
14/12/2015 16:04	ON	N22.14613 E113.92764	64 m	0:00:16	14 kph
14/12/2015 16:05	ON	N22.14567 E113.92759	51 m	0:00:13	14 kph
14/12/2015 16:05	ON	N22.14496 E113.92758	79 m	0:00:20	14 kph
14/12/2015 16:05	ON	N22.14454 E113.92760	47 m	0:00:12	14 kph
14/12/2015 16:05	ON	N22.14400 E113.92758	59 m	0:00:15	14 kph
14/12/2015 16:06	ON	N22.14344 E113.92749	63 m	0:00:16	14 kph
14/12/2015 16:06	ON	N22.14303 E113.92754	46 m	0:00:12	14 kph
14/12/2015 16:06	ON	N22.14269 E113.92782	48 m	0:00:13	13 kph
14/12/2015 16:06	ON	N22.14262 E113.92824	45 m	0:00:13	12 kph
14/12/2015 16:06	ON	N22.14270 E113.92862	40 m	0:00:11	13 kph
14/12/2015 16:07	ON	N22.14286 E113.92905	48 m	0:00:13	13 kph
14/12/2015 16:07	ON	N22.14311 E113.92951	55 m	0:00:15	13 kph
14/12/2015 16:07	ON	N22.14344 E113.92994	58 m	0:00:16	13 kph
14/12/2015 16:07	ON	N22.14372 E113.93028	47 m	0:00:13	13 kph
14/12/2015 16:08	ON	N22.14403 E113.93075	60 m	0:00:16	13 kph
14/12/2015 16:08	ON	N22.14432 E113.93113	51 m	0:00:14	13 kph
14/12/2015 16:08	ON	N22.14466 E113.93157	59 m	0:00:16	13 kph
14/12/2015 16:08	ON	N22.14496 E113.93196	52 m	0:00:14	13 kph
14/12/2015 16:09	ON	N22.14527 E113.93234	52 m	0:00:14	13 kph
14/12/2015 16:09	ON	N22.14553 E113.93267	45 m	0:00:17	10 kph
14/12/2015 16:09	OFF	N22.14560 E113.93276	11 m	0:00:06	7 kph
14/12/2015 16:09	OFF	N22.14561 E113.93278	3 m	0:00:02	6 kph
14/12/2015 16:09	OFF	N22.14565 E113.93284	7 m	0:00:05	5 kph
14/12/2015 16:09	OFF	N22.14572 E113.93297	15 m	0:00:13	4 kph
14/12/2015 16:10	OFF	N22.14574 E113.93306	10 m	0:00:12	3 kph
14/12/2015 16:10	OFF	N22.14574 E113.93316	10 m	0:00:15	2 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 16:10	OFF	N22.14572 E113.93323	8 m	0:00:16	2 kph
14/12/2015 16:10	OFF	N22.14573 E113.93329	6 m	0:00:11	2 kph
14/12/2015 16:11	OFF	N22.14591 E113.93357	36 m	0:00:15	9 kph
14/12/2015 16:11	OFF	N22.14611 E113.93385	36 m	0:00:10	13 kph
14/12/2015 16:11	ON	N22.14636 E113.93423	49 m	0:00:13	13 kph
14/12/2015 16:11	ON	N22.14676 E113.93473	68 m	0:00:18	14 kph
14/12/2015 16:11	ON	N22.14712 E113.93511	56 m	0:00:15	13 kph
14/12/2015 16:12	ON	N22.14744 E113.93535	44 m	0:00:12	13 kph
14/12/2015 16:12	ON	N22.14801 E113.93571	73 m	0:00:20	13 kph
14/12/2015 16:12	ON	N22.14844 E113.93598	55 m	0:00:15	13 kph
14/12/2015 16:12	ON	N22.14887 E113.93626	55 m	0:00:15	13 kph
14/12/2015 16:13	ON	N22.14929 E113.93654	55 m	0:00:15	13 kph
14/12/2015 16:13	ON	N22.14978 E113.93684	63 m	0:00:17	13 kph
14/12/2015 16:13	ON	N22.15014 E113.93685	40 m	0:00:12	12 kph
14/12/2015 16:13	ON	N22.15060 E113.93699	53 m	0:00:15	13 kph
14/12/2015 16:14	ON	N22.15100 E113.93713	46 m	0:00:13	13 kph
14/12/2015 16:14	ON	N22.15151 E113.93719	57 m	0:00:16	13 kph
14/12/2015 16:14	ON	N22.15193 E113.93721	47 m	0:00:13	13 kph
14/12/2015 16:14	ON	N22.15242 E113.93719	54 m	0:00:15	13 kph
14/12/2015 16:15	ON	N22.15287 E113.93720	50 m	0:00:14	13 kph
14/12/2015 16:15	ON	N22.15347 E113.93708	68 m	0:00:19	13 kph
14/12/2015 16:15	ON	N22.15392 E113.93682	57 m	0:00:16	13 kph
14/12/2015 16:15	ON	N22.15440 E113.93678	54 m	0:00:15	13 kph
14/12/2015 16:16	ON	N22.15496 E113.93681	62 m	0:00:17	13 kph
14/12/2015 16:16	ON	N22.15551 E113.93679	61 m	0:00:17	13 kph
14/12/2015 16:16	ON	N22.15611 E113.93680	66 m	0:00:18	13 kph
14/12/2015 16:17	ON	N22.15653 E113.93688	47 m	0:00:13	13 kph
14/12/2015 16:17	ON	N22.15708 E113.93697	62 m	0:00:17	13 kph
14/12/2015 16:17	ON	N22.15767 E113.93700	66 m	0:00:18	13 kph
14/12/2015 16:17	ON	N22.15832 E113.93704	73 m	0:00:20	13 kph
14/12/2015 16:18	ON	N22.15893 E113.93697	68 m	0:00:19	13 kph
14/12/2015 16:18	ON	N22.15945 E113.93684	59 m	0:00:16	13 kph
14/12/2015 16:18	ON	N22.15991 E113.93684	51 m	0:00:14	13 kph
14/12/2015 16:19	ON	N22.16037 E113.93688	51 m	0:00:14	13 kph
14/12/2015 16:19	ON	N22.16092 E113.93684	62 m	0:00:17	13 kph
14/12/2015 16:19	ON	N22.16152 E113.93682	67 m	0:00:18	13 kph
14/12/2015 16:19	ON	N22.16205 E113.93685	59 m	0:00:16	13 kph
14/12/2015 16:20	ON	N22.16251 E113.93685	51 m	0:00:14	13 kph
14/12/2015 16:20	ON	N22.16314 E113.93679	70 m	0:00:19	13 kph
14/12/2015 16:20	ON	N22.16367 E113.93680	59 m	0:00:16	13 kph
14/12/2015 16:20	ON	N22.16413 E113.93685	52 m	0:00:14	13 kph
14/12/2015 16:21	ON	N22.16459 E113.93685	51 m	0:00:14	13 kph
14/12/2015 16:21	ON	N22.16522 E113.93686	70 m	0:00:19	13 kph
14/12/2015 16:21	ON	N22.16569 E113.93687	53 m	0:00:14	14 kph
14/12/2015 16:21	ON	N22.16615 E113.93686	52 m	0:00:14	13 kph
14/12/2015 16:22	ON	N22.16664 E113.93688	55 m	0:00:15	13 kph
14/12/2015 16:22	ON	N22.16710 E113.93690	51 m	0:00:14	13 kph
14/12/2015 16:22	ON	N22.16770 E113.93688	67 m	0:00:18	13 kph
14/12/2015 16:22	ON	N22.16820 E113.93687	56 m	0:00:15	13 kph
14/12/2015 16:23	ON	N22.16874 E113.93694	60 m	0:00:16	13 kph
14/12/2015 16:23	ON	N22.16923 E113.93699	55 m	0:00:15	13 kph
14/12/2015 16:23	ON	N22.16972 E113.93697	55 m	0:00:15	13 kph
14/12/2015 16:24	ON	N22.17028 E113.93697	62 m	0:00:17	13 kph
14/12/2015 16:24	ON	N22.17078 E113.93697	55 m	0:00:15	13 kph
14/12/2015 16:24	ON	N22.17130 E113.93696	58 m	0:00:16	13 kph
14/12/2015 16:24	ON	N22.17196 E113.93697	74 m	0:00:20	13 kph
14/12/2015 16:25	ON	N22.17250 E113.93697	60 m	0:00:16	13 kph
14/12/2015 16:25	ON	N22.17313 E113.93696	71 m	0:00:19	13 kph
14/12/2015 16:25	ON	N22.17370 E113.93696	63 m	0:00:17	13 kph
14/12/2015 16:25	ON	N22.17413 E113.93697	48 m	0:00:13	13 kph
14/12/2015 16:26	ON	N22.17467 E113.93692	60 m	0:00:16	13 kph
14/12/2015 16:26	ON	N22.17524 E113.93687	64 m	0:00:17	13 kph
14/12/2015 16:26	ON	N22.17571 E113.93687	52 m	0:00:14	13 kph
14/12/2015 16:26	ON	N22.17617 E113.93690	52 m	0:00:14	13 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 16:27	ON	N22.17657 E113.93691	44 m	0:00:12	13 kph
14/12/2015 16:27	ON	N22.17715 E113.93691	64 m	0:00:17	14 kph
14/12/2015 16:27	ON	N22.17786 E113.93688	79 m	0:00:21	14 kph
14/12/2015 16:28	ON	N22.17849 E113.93689	70 m	0:00:19	13 kph
14/12/2015 16:28	ON	N22.17910 E113.93690	68 m	0:00:18	14 kph
14/12/2015 16:28	ON	N22.17966 E113.93684	63 m	0:00:17	13 kph
14/12/2015 16:29	ON	N22.18027 E113.93680	67 m	0:00:18	13 kph
14/12/2015 16:29	ON	N22.18076 E113.93683	55 m	0:00:15	13 kph
14/12/2015 16:29	ON	N22.18130 E113.93680	59 m	0:00:16	13 kph
14/12/2015 16:29	ON	N22.18193 E113.93675	71 m	0:00:19	13 kph
14/12/2015 16:30	ON	N22.18243 E113.93675	56 m	0:00:15	14 kph
14/12/2015 16:30	ON	N22.18297 E113.93676	60 m	0:00:16	13 kph
14/12/2015 16:30	ON	N22.18354 E113.93679	64 m	0:00:17	14 kph
14/12/2015 16:30	ON	N22.18416 E113.93679	68 m	0:00:18	14 kph
14/12/2015 16:31	ON	N22.18473 E113.93678	63 m	0:00:17	13 kph
14/12/2015 16:31	ON	N22.18540 E113.93679	75 m	0:00:20	13 kph
14/12/2015 16:31	ON	N22.18600 E113.93684	67 m	0:00:18	13 kph
14/12/2015 16:32	ON	N22.18664 E113.93689	71 m	0:00:19	14 kph
14/12/2015 16:32	ON	N22.18729 E113.93691	72 m	0:00:19	14 kph
14/12/2015 16:32	ON	N22.18787 E113.93692	64 m	0:00:17	14 kph
14/12/2015 16:33	ON	N22.18841 E113.93693	60 m	0:00:16	13 kph
14/12/2015 16:33	ON	N22.18901 E113.93694	68 m	0:00:18	14 kph
14/12/2015 16:33	ON	N22.18945 E113.93694	49 m	0:00:13	14 kph
14/12/2015 16:33	ON	N22.19006 E113.93693	68 m	0:00:18	14 kph
14/12/2015 16:34	ON	N22.19060 E113.93691	60 m	0:00:16	14 kph
14/12/2015 16:34	ON	N22.19117 E113.93692	63 m	0:00:17	13 kph
14/12/2015 16:34	ON	N22.19178 E113.93693	68 m	0:00:18	14 kph
14/12/2015 16:35	ON	N22.19241 E113.93685	71 m	0:00:19	13 kph
14/12/2015 16:35	ON	N22.19309 E113.93681	75 m	0:00:20	14 kph
14/12/2015 16:35	ON	N22.19363 E113.93686	61 m	0:00:16	14 kph
14/12/2015 16:35	ON	N22.19418 E113.93691	61 m	0:00:16	14 kph
14/12/2015 16:36	ON	N22.19472 E113.93691	60 m	0:00:16	14 kph
14/12/2015 16:36	ON	N22.19546 E113.93685	83 m	0:00:22	14 kph
14/12/2015 16:36	ON	N22.19601 E113.93684	61 m	0:00:16	14 kph
14/12/2015 16:37	ON	N22.19655 E113.93688	60 m	0:00:16	14 kph
14/12/2015 16:37	ON	N22.19734 E113.93692	87 m	0:00:23	14 kph
14/12/2015 16:37	ON	N22.19809 E113.93690	84 m	0:00:22	14 kph
14/12/2015 16:38	ON	N22.19863 E113.93689	60 m	0:00:16	14 kph
14/12/2015 16:38	ON	N22.19921 E113.93692	64 m	0:00:17	14 kph
14/12/2015 16:38	ON	N22.19999 E113.93694	88 m	0:00:23	14 kph
14/12/2015 16:39	ON	N22.20063 E113.93687	71 m	0:00:19	13 kph
14/12/2015 16:39	ON	N22.20119 E113.93684	63 m	0:00:17	13 kph
14/12/2015 16:39	ON	N22.20190 E113.93684	79 m	0:00:21	13 kph
14/12/2015 16:40	ON	N22.20263 E113.93689	81 m	0:00:21	14 kph
14/12/2015 16:40	ON	N22.20337 E113.93682	82 m	0:00:22	13 kph
14/12/2015 16:40	ON	N22.20400 E113.93686	70 m	0:00:19	13 kph
14/12/2015 16:41	ON	N22.20467 E113.93686	75 m	0:00:20	13 kph
14/12/2015 16:41	ON	N22.20528 E113.93685	68 m	0:00:18	14 kph
14/12/2015 16:41	ON	N22.20595 E113.93685	75 m	0:00:20	14 kph
14/12/2015 16:42	ON	N22.20672 E113.93678	86 m	0:00:23	13 kph
14/12/2015 16:42	ON	N22.20747 E113.93676	83 m	0:00:22	14 kph
14/12/2015 16:42	ON	N22.20804 E113.93679	64 m	0:00:17	13 kph
14/12/2015 16:43	ON	N22.20878 E113.93685	83 m	0:00:22	14 kph
14/12/2015 16:43	ON	N22.20949 E113.93677	80 m	0:00:21	14 kph
14/12/2015 16:43	ON	N22.21026 E113.93658	87 m	0:00:23	14 kph
14/12/2015 16:44	ON	N22.21088 E113.93657	69 m	0:00:19	13 kph
14/12/2015 16:44	ON	N22.21157 E113.93665	78 m	0:00:21	13 kph
14/12/2015 16:44	ON	N22.21221 E113.93685	74 m	0:00:20	13 kph
14/12/2015 16:45	ON	N22.21291 E113.93691	78 m	0:00:21	13 kph
14/12/2015 16:45	ON	N22.21360 E113.93700	78 m	0:00:21	13 kph
14/12/2015 16:45	ON	N22.21443 E113.93699	92 m	0:00:25	13 kph
14/12/2015 16:46	ON	N22.21509 E113.93694	74 m	0:00:20	13 kph
14/12/2015 16:46	ON	N22.21591 E113.93706	92 m	0:00:25	13 kph
14/12/2015 16:47	ON	N22.21673 E113.93695	92 m	0:00:25	13 kph

Appendix I. (cont'd)

Date & Time	EFFORT	Position	Leg Length	Leg Time	Leg Speed
14/12/2015 16:47	ON	N22.21759 E113.93703	96 m	0:00:26	13 kph
14/12/2015 16:47	ON	N22.21835 E113.93700	84 m	0:00:23	13 kph
14/12/2015 16:48	ON	N22.21914 E113.93691	89 m	0:00:24	13 kph
14/12/2015 16:48	ON	N22.21995 E113.93692	90 m	0:00:24	14 kph
14/12/2015 16:49	ON	N22.22091 E113.93688	107 m	0:00:29	13 kph
14/12/2015 16:49	ON	N22.22181 E113.93678	101 m	0:00:27	13 kph
14/12/2015 16:50	ON	N22.22271 E113.93680	101 m	0:00:27	13 kph
14/12/2015 16:50	ON	N22.22346 E113.93690	83 m	0:00:23	13 kph

Appendix II. Survey Effort Database in SWL (December 2015)

(Abbreviations: BEAU = Beaufort Sea State; P = Primary Line Effort; S = Secondary Line Effort)

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
3-Dec-15	SW LANTAU	2	16.37	WINTER	STANDARD31516	HKCRP	P
3-Dec-15	SW LANTAU	3	0.88	WINTER	STANDARD31516	HKCRP	P
3-Dec-15	SW LANTAU	2	4.24	WINTER	STANDARD31516	HKCRP	S
3-Dec-15	SW LANTAU	3	3.29	WINTER	STANDARD31516	HKCRP	S
14-Dec-15	SW LANTAU	2	7.25	WINTER	STANDARD31516	HYD-HZMB	P
14-Dec-15	SW LANTAU	3	45.32	WINTER	STANDARD31516	HYD-HZMB	P
14-Dec-15	SW LANTAU	4	2.74	WINTER	STANDARD31516	HYD-HZMB	P
14-Dec-15	SW LANTAU	2	5.08	WINTER	STANDARD31516	HYD-HZMB	S
14-Dec-15	SW LANTAU	3	10.01	WINTER	STANDARD31516	HYD-HZMB	S
14-Dec-15	SW LANTAU	4	0.60	WINTER	STANDARD31516	HYD-HZMB	S
18-Dec-15	SW LANTAU	2	14.40	WINTER	STANDARD31516	HKCRP	P
18-Dec-15	SW LANTAU	3	6.59	WINTER	STANDARD31516	HKCRP	P
18-Dec-15	SW LANTAU	2	6.92	WINTER	STANDARD31516	HKCRP	S
18-Dec-15	SW LANTAU	3	4.54	WINTER	STANDARD31516	HKCRP	S
30-Dec-15	SW LANTAU	1	2.10	WINTER	STANDARD31516	HKCRP	P
30-Dec-15	SW LANTAU	2	20.56	WINTER	STANDARD31516	HKCRP	P
30-Dec-15	SW LANTAU	2	10.26	WINTER	STANDARD31516	HKCRP	S
30-Dec-15	SW LANTAU	3	1.38	WINTER	STANDARD31516	HKCRP	S

Appendix III. Chinese White Dolphin Sighting Database in SWL (December 2015)

(Abberviations: STG# = Sighting Number; HRD SZ = Dolphin Herd Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance; ND = Not Determined; BOAT ASSOC. = Fishing Boat Association; P/S: Sighting Made on Primary/Secondary Lines)

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.	P/S
3-Dec-15	1	1326	8	SW LANTAU	2	361	ON	HKCRP	806414	803467	WINTER	NONE	P
14-Dec-15	1	1242	2	SW LANTAU	3	88	ON	HYD-HZMB	807537	806522	WINTER	PURSE-SEINE	P
14-Dec-15	2	1352	2	SW LANTAU	3	18	ON	HYD-HZMB	806705	807428	WINTER	NONE	P
18-Dec-15	2	1352	1	SW LANTAU	2	138	ON	HKCRP	804766	808136	WINTER	NONE	S
18-Dec-15	3	1431	5	SW LANTAU	3	112	ON	HKCRP	806352	806499	WINTER	NONE	P
18-Dec-15	4	1525	2	SW LANTAU	2	263	ON	HKCRP	803244	804481	WINTER	NONE	P
18-Dec-15	5	1536	4	SW LANTAU	2	207	ON	HKCRP	804042	804483	WINTER	NONE	P

Appendix IV. Individual dolphins identified during HYD-HZMB and AFCD monitoring surveys in SWL waters in December 2015

ID#	DATE	STG#	TYPE	AREA
CH38	18/12/15	5	HKCRP	SW LANTAU
NL120	14/12/15	1	HYD-HZMB	SW LANTAU
SL05	03/12/15	1	HKCRP	SW LANTAU
SL50	18/12/15	4	HKCRP	SW LANTAU
SL55	03/12/15	1	HKCRP	SW LANTAU
WL29	03/12/15	1	HKCRP	SW LANTAU
WL62	14/12/15	1	HYD-HZMB	SW LANTAU
WL91	18/12/15	3	HKCRP	SW LANTAU
WL129	03/12/15	1	HKCRP	SW LANTAU
WL210	03/12/15	1	HKCRP	SW LANTAU
WL221	14/12/15	1	HYD-HZMB	SW LANTAU
WL235	18/12/15	3	HKCRP	SW LANTAU

Appendix V. Photographs of Identified Individual Dolphins in December 2015 in SWL waters

Appendix V (cont'd).