



Langara

British Columbia, Canada

54°15.20'N 133°02.41'W

All times have been adjusted for daylight saving time on the appropriate dates.

For use with *Ports and Passes, 2012*.

For detailed instructions on reading these tables, consult page 11 of your *Ports and Passes*.

Published by Chyna Sea Ventures Ltd.
Suite 10 - 327 Prideaux Street, Nanaimo, BC, V9R2N4

© 2011 Chyna Sea Ventures Ltd.
All rights reserved.

For dealer, distributing or advertising information:

Phone: (250) 740-1184

Toll Free: 1 (866) 627-8324

Fax: (250) 740-1185

e-mail: info@portsandpasses.com

www.portsandpasses.com



January 2012 February

DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M
1	6:50a 1:29p 7:15p	13.4 6.5 10.7	4.1 2.0 3.3	16	6:17a 1:00p 7:05p	14.7 5.0 11.4	4.5 1.5 3.5	1	12:40a 7:30a 2:50p 9:18p	8.1 13.0 5.9 10.2	2.5 4.0 1.8 3.1	16	1:32a 8:04a 3:20p 9:58p	7.9 14.2 4.2 11.5	2.4 4.3 1.3 3.5
2	12:51a 7:43a 2:40p 8:43p	7.0 13.3 6.1 10.4	2.1 4.1 1.9 3.2	17	12:34a 7:17a 2:19p 8:37p	6.5 14.7 4.6 11.1	2.0 4.5 1.4 3.4	2	1:59a 8:37a 3:57p 10:36p	8.6 13.1 5.2 10.7	2.6 4.0 1.6 3.3	17	3:07a 9:22a 4:28p 11:04p	7.9 14.2 3.6 12.3	2.4 4.3 1.1 3.8
3	1:54a 8:38a 3:43p 10:05p	7.7 13.4 5.4 10.6	2.3 4.1 1.6 3.2	18	1:47a 8:25a 3:35p 10:06p	7.3 14.7 3.9 11.5	2.2 4.5 1.2 3.5	3	3:22a 9:40a 4:50p 11:26p	8.6 13.4 4.4 11.4	2.6 4.1 1.3 3.5	18	4:24a 10:31a 5:22p 11:53p	7.4 14.6 2.9 13.0	2.3 4.5 0.9 4.0
4	3:02a 9:31a 4:36p 11:07p	8.1 13.7 4.7 11.1	2.5 4.2 1.4 3.4	19	3:09a 9:33a 4:40p 11:14p	7.6 15.0 3.0 12.2	2.3 4.6 0.9 3.7	4	4:27a 10:34a 5:33p	8.1 14.0 3.5	2.5 4.3 1.1	19	5:23a 11:27a 6:07p	6.6 14.9 2.5	2.0 4.5 0.8
5	4:03a 10:19a 5:20p 11:53p	8.1 14.0 3.9 11.7	2.5 4.3 1.2 3.6	20	4:23a 10:36a 5:35p	7.4 15.4 2.2	2.3 4.7 0.7	5	12:05a 5:18a 11:22a 6:11p	12.1 7.5 14.6 2.7	3.7 2.3 4.5 0.8	20	12:33a 6:12a 12:15p 6:46p	13.7 5.7 15.2 2.3	4.2 1.7 4.6 0.7
6	4:55a 11:02a 6:00p	7.9 14.5 3.1	2.4 4.4 0.9	21	12:08a 5:25a 11:31a 6:22p	13.0 6.9 15.8 1.6	4.0 2.1 4.8 0.5	6	12:39a 6:03a 12:07p 6:47p	12.9 6.6 15.1 2.1	3.9 2.0 4.6 0.6	21	1:09a 6:54a 12:58p 7:21p	14.2 5.0 15.2 2.3	4.3 1.5 4.6 0.7
7	12:31a 5:39a 11:44a 6:36p	12.3 7.6 14.9 2.5	3.8 2.3 4.5 0.8	22	12:53a 6:18a 12:22p 7:05p	13.6 6.3 16.0 1.3	4.1 1.9 4.9 0.4	7	1:12a 6:45a 12:49p 7:22p	13.6 5.8 15.5 1.7	4.1 1.8 4.7 0.5	22	1:42a 7:33a 1:38p 7:53p	14.6 4.5 15.1 2.7	4.5 1.4 4.6 0.8
8	1:06a 6:20a 12:23p 7:12p	12.8 7.2 15.3 2.0	3.9 2.2 4.7 0.6	23	1:33a 7:05a 1:07p 7:44p	14.2 5.8 16.0 1.3	4.3 1.8 4.9 0.4	8	1:45a 7:26a 1:31p 7:56p	14.3 5.0 15.7 1.7	4.4 1.5 4.8 0.5	23	2:13a 8:10a 2:15p 8:23p	14.8 4.2 14.7 3.2	4.5 1.3 4.5 1.0
9	1:40a 7:00a 1:03p 7:46p	13.3 6.7 15.5 1.7	4.1 2.0 4.7 0.5	24	2:10a 7:48a 1:50p 8:20p	14.5 5.4 15.7 1.7	4.4 1.6 4.8 0.5	9	2:18a 8:08a 2:14p 8:31p	14.9 4.3 15.5 2.0	4.5 1.3 4.7 0.6	24	2:42a 8:46a 2:51p 8:52p	14.8 4.1 14.1 3.9	4.5 1.3 4.3 1.2
10	2:14a 7:40a 1:42p 8:21p	13.7 6.3 15.6 1.6	4.2 1.9 4.8 0.5	25	2:46a 8:30a 2:31p 8:53p	14.7 5.2 15.2 2.3	4.5 1.6 4.6 0.7	10	2:53a 8:52a 2:58p 9:06p	15.4 3.9 15.1 2.6	4.7 1.2 4.6 0.8	25	3:12a 9:22a 3:27p 9:21p	14.7 4.3 13.4 4.8	4.5 1.3 4.1 1.5
11	2:48a 8:22a 2:23p 8:56p	14.1 5.9 15.4 1.9	4.3 1.8 4.7 0.6	26	3:20a 9:11a 3:10p 9:26p	14.7 5.2 14.5 3.2	4.5 1.6 4.4 1.0	11	3:29a 9:39a 3:45p 9:44p	15.6 3.7 14.3 3.6	4.8 1.1 4.4 1.1	26	3:42a 10:00a 4:05p 9:50p	14.5 4.6 12.7 5.7	4.4 1.4 3.9 1.7
12	3:24a 9:07a 3:07p 9:32p	14.4 5.6 14.9 2.4	4.4 1.7 4.5 0.7	27	3:54a 9:53a 3:50p 9:58p	14.5 5.3 13.6 4.2	4.4 1.6 4.1 1.3	12	4:09a 10:29a 4:37p 10:24p	15.6 3.8 13.3 4.7	4.8 1.2 4.1 1.4	27	4:13a 10:42a 4:47p 10:20p	14.1 5.0 11.9 6.6	4.3 1.5 3.6 2.0
13	4:01a 9:55a 3:54p 10:09p	14.6 5.4 14.1 3.2	4.5 1.6 4.3 1.0	28	4:28a 10:37a 4:32p 10:30p	14.3 5.6 12.6 5.2	4.4 1.7 3.8 1.6	13	4:53a 11:27a 5:37p 11:11p	15.4 4.1 12.3 5.9	4.7 1.3 3.8 1.8	28	4:48a 11:30a 5:36p 10:56p	13.7 5.5 11.1 7.4	4.2 1.7 3.4 2.3
14	4:42a 10:49a 4:46p 10:50p	14.8 5.3 13.2 4.2	4.5 1.6 4.0 1.3	29	5:04a 11:26a 5:19p 11:04p	13.9 5.9 11.6 6.3	4.2 1.8 3.5 1.9	14	5:44a 11:26p 6:52p	15.0 4.4 11.4	4.6 1.3 3.5	29	5:31a 12:30p 6:43p 11:46p	13.2 5.8 10.5 8.2	4.0 1.8 3.2 2.5
15	5:26a 11:50a 5:49p 11:37p	14.8 5.2 12.2 5.4	4.5 1.6 3.7 1.6	30	5:44a 12:24p 6:18p 11:45p	13.6 6.2 10.8 7.3	4.1 1.9 3.3 2.2	15	12:10a 6:47a 1:57p 8:28p	7.1 14.5 4.5 11.1	2.2 4.4 1.4 3.4				
				31	6:32a 1:34p 7:38p	13.2 6.2 10.2	4.0 1.9 3.1								



March

2012

April

DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M
1	6:27a 1:46p 8:19p	12.8 5.9 10.3	3.9 1.8 3.1	16	2:33a 8:49a 3:56p 10:39p	7.9 13.5 4.4 11.9	2.4 4.1 1.3 3.6	1	3:13a 9:15a 4:12p 10:51p	8.2 12.2 5.0 11.8	2.5 3.7 1.5 3.6
2	1:06a 7:40a 3:05p 9:49p	8.7 12.6 5.5 10.7	2.7 3.8 1.7 3.3	17	4:08a 10:12a 5:05p 11:40p	7.6 13.4 4.1 12.5	2.3 4.1 1.3 3.8	2	4:31a 10:31a 5:07p 11:37p	7.3 12.6 4.4 12.7	2.2 3.8 3.3 3.9
3	2:45a 8:58a 4:07p 10:45p	8.6 12.8 4.8 11.4	2.6 3.9 1.5 3.5	18	5:20a 11:22a 5:58p	6.8 13.6 3.8	2.1 4.1 1.2	3	5:30a 11:34a 5:54p	5.9 13.2 3.9	1.8 4.0 1.2
4	4:01a 10:04a 4:56p 11:26p	7.9 13.3 4.0 12.3	2.4 4.1 1.2 3.8	19	12:26a 6:15a 12:18p 6:42p	13.2 5.8 13.9 3.5	4.0 1.8 4.2 1.1	4	12:16a 6:19a 12:29p 6:36p	13.7 4.5 13.9 3.5	4.2 1.4 4.2 1.1
5	4:56a 11:00a 5:37p	6.9 14.0 3.2	2.1 4.3 1.0	20	1:04a 6:59a 1:05p 7:19p	13.8 4.9 14.1 3.5	4.2 1.5 4.3 1.1	5	12:53a 7:04a 1:18p 7:17p	14.8 3.1 14.5 3.3	4.5 0.9 4.4 1.0
6	12:01a 5:42a 11:49a 6:15p	13.2 5.7 14.7 2.6	4.0 1.7 4.5 0.8	21	1:37a 7:38a 1:47p 7:52p	14.3 4.2 14.2 3.6	4.4 1.3 4.3 1.1	6	1:31a 7:49a 2:06p 7:57p	15.7 1.9 14.8 3.4	4.8 0.6 4.5 1.0
7	12:35a 6:26a 12:34p 6:51p	14.2 4.4 15.2 2.3	4.3 1.3 4.6 0.7	22	2:08a 8:14a 2:24p 8:23p	14.6 3.6 14.2 3.9	4.5 1.1 4.3 1.2	7	2:09a 8:33a 2:53p 8:37p	16.4 1.1 14.8 3.8	5.0 0.3 4.5 1.2
8	1:09a 7:08a 1:19p 7:27p	15.0 3.4 15.4 2.3	4.6 1.0 4.7 0.7	23	2:36a 8:48a 3:00p 8:52p	14.8 3.3 14.0 4.4	4.5 1.0 4.3 1.3	8	2:49a 9:19a 3:41p 9:18p	16.7 0.8 14.6 4.4	5.1 0.2 4.5 1.3
9	1:44a 7:51a 2:04p 8:04p	15.8 2.6 15.4 2.7	4.8 0.8 4.7 0.8	24	3:04a 9:21a 3:34p 9:20p	14.9 3.2 13.6 4.9	4.5 1.0 4.1 1.5	9	3:31a 10:07a 4:31p 10:03p	16.7 0.9 14.0 5.1	5.1 0.3 4.3 1.6
10	2:20a 8:35a 2:50p 8:41p	16.2 2.1 15.0 3.4	4.9 0.6 4.6 1.0	25	3:32a 9:55a 4:09p 9:48p	14.8 3.3 13.2 5.6	4.5 1.0 4.0 1.7	10	4:16a 10:58a 5:24p 10:52p	16.3 1.5 13.4 6.0	5.0 0.5 4.1 1.8
11	3:58a 10:22a 4:37p 10:21p	16.4 2.1 14.3 4.3	5.0 0.6 4.4 1.3	26	4:01a 10:30a 4:45p 10:17p	14.6 3.6 12.7 6.2	4.5 1.1 3.9 1.9	11	5:06a 11:53a 6:24p 11:50p	15.5 2.4 12.7 6.8	4.7 0.7 3.9 2.1
12	4:40a 11:12a 5:29p 11:04p	16.1 2.5 13.3 5.4	4.9 0.8 4.1 1.6	27	4:31a 11:08a 5:24p 10:49p	14.2 4.1 12.0 6.9	4.3 1.3 3.7 2.1	12	6:02a 12:56p 7:33p	14.5 3.3 12.2	4.4 1.0 3.7
13	5:26a 12:09p 6:30p 11:55p	15.6 3.1 12.4 6.5	4.8 0.9 3.8 2.0	28	5:05a 11:51a 6:10p 11:26p	13.8 4.6 11.4 7.6	4.2 1.4 3.5 2.3	13	1:02a 7:10a 2:06p 8:52p	7.4 13.6 4.1 12.1	2.3 4.1 1.3 3.7
14	6:20a 1:15p 7:44p	14.8 3.9 11.6	4.5 1.2 3.5	29	5:46a 12:43p 7:09p	13.2 5.1 10.9	4.0 1.6 3.3	14	2:30a 8:30a 3:20p 10:05p	7.5 12.8 4.5 12.4	2.3 3.9 1.4 3.8
15	1:02a 7:27a 2:35p 9:15p	7.5 14.0 4.4 11.4	2.3 4.3 1.3 3.5	30	12:17a 6:39a 1:48p 8:27p	8.1 12.7 5.4 10.7	2.5 3.9 1.6 3.3	15	3:56a 9:53a 4:27p 11:03p	7.0 12.5 4.7 12.9	2.1 3.8 1.4 3.9
				31	1:36a 7:51a 3:03p 9:50p	8.5 12.3 5.4 11.0	2.6 3.8 1.6 3.4				

LANGARA



DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M
1	4:00a 9:57a 4:12p 10:44p	6.4 12.0 4.8 13.3	2.0 3.7 1.5 4.1	16	5:31a 11:40a 5:22p 11:47p	4.8 11.6 5.9 13.8	1.5 3.5 1.8 4.2	1	5:31a 11:51a 5:18p 11:37p	2.8 12.2 5.6 15.4	0.9 3.7 1.7 4.7	16	6:32a 12:59p 6:09p	3.5 11.4 7.1	1.1 3.5 2.2
2	5:01a 11:08a 5:06p 11:29p	5.0 12.4 4.7 14.3	1.5 3.8 1.4 4.4	17	6:17a 12:32p 6:06p	4.0 11.9 6.1	1.2 3.6 1.9	2	6:25a 12:51p 6:13p	1.6 12.7 5.6	0.5 3.9 1.7	17	12:20a 7:11a 1:40p 6:50p	14.0 2.9 11.7 7.0	4.3 0.9 3.6 2.1
3	5:54a 12:08p 5:55p	3.4 13.0 4.6	1.0 4.0 1.4	18	12:20a 6:56a 1:17p 6:44p	14.1 3.3 12.1 6.2	4.3 1.0 3.7 1.9	3	12:27a 7:16a 1:45p 7:05p	16.1 0.7 13.2 5.6	4.9 0.2 4.0 1.7	18	12:57a 7:48a 2:16p 7:28p	14.3 2.4 12.1 6.9	4.4 0.7 3.7 2.1
4	12:12a 6:43a 1:03p 6:42p	15.3 2.0 13.6 4.5	4.7 0.6 4.1 1.4	19	12:54a 7:32a 1:56p 7:19p	14.3 2.8 12.4 6.3	4.4 0.9 3.8 1.9	4	1:16a 8:06a 2:36p 7:57p	16.5 0.1 13.6 5.5	5.0 0.0 4.1 1.7	19	1:34a 8:23a 2:51p 8:05p	14.5 2.1 12.3 6.7	4.4 0.6 3.8 2.0
5	12:55a 7:30a 1:54p 7:28p	16.1 0.9 14.0 4.6	4.9 0.3 4.3 1.4	20	1:26a 8:07a 2:32p 7:53p	14.5 2.4 12.5 6.4	4.4 0.7 3.8 2.0	5	2:06a 8:54a 3:25p 8:48p	16.6 -0.1 13.8 5.5	5.1 0.0 4.2 1.7	20	2:10a 8:57a 3:25p 8:43p	14.6 1.9 12.5 6.6	4.5 0.6 3.8 2.0
6	1:39a 8:18a 2:44p 8:13p	16.6 0.3 14.2 4.9	5.1 0.1 4.3 1.5	21	1:58a 8:41a 3:07p 8:26p	14.6 2.2 12.6 6.6	4.5 0.7 3.8 2.0	6	2:55a 9:42a 4:13p 9:40p	16.4 0.2 13.8 5.6	5.0 1.0 4.2 1.7	21	2:46a 9:31a 4:00p 9:22p	14.6 1.9 12.7 6.5	4.5 0.6 3.9 2.0
7	2:23a 9:06a 3:34p 9:01p	16.9 0.1 14.1 5.2	5.2 0.0 4.3 1.6	22	2:30a 9:15a 3:42p 8:59p	14.7 2.2 12.6 6.7	4.5 0.7 3.8 2.0	7	3:45a 10:28a 5:00p 10:34p	15.9 0.8 13.8 5.8	4.8 0.2 4.2 1.8	22	3:23a 10:06a 4:35p 10:03p	14.5 2.0 12.9 6.4	4.4 0.6 3.9 2.0
8	3:10a 9:54a 4:24p 9:50p	16.7 0.3 13.9 5.6	5.1 0.1 4.2 1.7	23	3:04a 9:50a 4:18p 9:35p	14.5 2.3 12.5 6.9	4.4 0.7 3.8 2.1	8	4:36a 11:14a 5:49p 11:31p	15.1 1.6 13.6 6.0	4.6 0.5 4.1 1.8	23	4:03a 10:41a 5:12p 10:49p	14.1 2.3 13.0 6.2	4.3 0.7 4.0 1.9
9	3:59a 10:45a 5:16p 10:44p	16.2 1.0 13.5 6.1	4.9 0.3 4.1 1.9	24	3:39a 10:25a 4:56p 10:14p	14.3 2.6 12.4 7.0	4.4 0.8 3.8 2.1	9	5:28a 12:01p 6:39p	14.0 2.7 13.4	4.3 0.8 4.1	24	4:47a 11:18a 5:52p 11:41p	13.6 2.8 13.2 6.1	4.1 0.9 4.0 1.9
10	4:50a 11:37a 6:12p 11:45p	15.3 1.9 13.1 6.6	4.7 0.6 4.0 2.0	25	4:16a 11:03a 5:37p 11:01p	13.9 2.9 12.3 7.2	4.2 0.9 3.8 2.2	10	12:32a 6:23a 12:49p 7:32p	6.2 12.9 3.8 13.2	1.9 3.9 1.9 4.0	25	5:36a 11:58a 6:35p	12.9 3.5 13.4	3.9 1.1 4.1
11	5:47a 12:31p 7:12p	14.3 2.9 12.8	4.4 0.9 3.9	26	4:59a 11:44a 6:22p 11:56p	13.4 3.3 12.3 7.2	4.1 1.0 3.8 2.2	11	1:39a 7:25a 1:39p 8:26p	6.2 11.8 4.8 13.1	1.9 3.6 1.5 4.0	26	12:40a 6:33a 12:43p 7:23p	5.8 12.1 4.3 13.6	1.8 3.7 1.3 4.1
12	12:54a 6:49a 1:30p 8:16p	6.9 13.2 3.8 12.7	2.1 4.0 1.2 3.9	27	5:50a 12:30p 7:12p	12.7 3.8 12.4	3.9 1.2 3.8	12	2:49a 8:38a 2:34p 9:20p	6.0 11.0 5.7 13.2	1.8 3.4 1.7 4.0	27	1:46a 7:41a 1:34p 8:16p	5.4 11.5 5.1 13.9	1.6 3.6 1.6 4.2
13	2:12a 8:01a 2:32p 9:19p	6.8 12.2 4.6 12.8	2.1 3.7 1.4 3.9	28	1:02a 6:51a 1:21p 8:06p	7.0 12.1 4.4 12.7	2.1 3.7 1.3 3.9	13	3:58a 9:57a 3:33p 10:12p	5.5 10.6 6.4 13.3	1.7 3.2 2.0 4.1	28	2:57a 9:01a 2:35p 9:14p	4.7 11.1 5.8 14.3	1.4 3.4 1.8 4.4
14	3:30a 9:20a 3:35p 10:15p	6.4 11.6 5.2 13.1	2.0 3.5 1.6 4.0	29	2:15a 8:05a 2:18p 9:01p	6.4 11.6 4.9 13.2	2.0 3.5 1.5 4.0	14	4:58a 11:11a 4:31p 10:51p	4.8 10.7 6.8 13.5	1.5 3.3 2.1 4.1	29	4:08a 10:25a 3:43p 10:14p	3.8 11.1 6.3 14.7	1.2 3.4 1.9 4.5
15	4:37a 10:36a 4:32p 11:03p	5.7 11.5 5.6 13.4	1.7 3.5 1.7 4.1	30	3:27a 9:26a 3:19p 9:55p	5.4 11.4 5.2 13.9	1.6 3.5 1.6 4.2	15	5:48a 12:10p 5:23p 11:41p	4.1 11.0 7.0 13.7	1.3 3.4 2.1 4.2	30	5:13a 11:39a 4:51p 11:13p	2.8 11.6 6.5 15.2	0.9 3.5 2.0 4.6
				31	4:32a 10:43a 4:20p 10:47p	4.2 11.7 5.5 14.7	1.3 3.6 1.7 4.5								



July 2012 August

DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M
1	6:12a 12:42p Sun 5:55p	1.8 12.2 6.3	0.5 3.7 1.9	16	6:47a 1:17p Mon 6:26p	3.3 11.5 7.2	1.0 3.5 2.2	1	12:57a 7:41a Wed 2:06p 7:39p	15.5 1.2 13.5 5.1	4.7 0.4 4.1 1.6	16	12:53a 7:31a Thu 1:52p 7:28p	14.2 2.5 12.9 5.4	4.3 0.8 3.9 1.6
2	12:09a 7:05a Mon 1:36p 6:53p	15.7 1.0 12.8 6.0	4.8 0.3 3.9 1.8	17	12:33a 7:25a Tue 1:53p 7:08p	14.1 2.7 11.9 6.8	4.3 0.8 3.6 2.1	2	1:47a 8:23a Thu 2:46p 8:26p	15.7 1.1 14.0 4.6	4.8 0.3 4.3 1.4	17	1:35a 8:05a Fri 2:24p 8:07p	14.6 2.2 13.5 4.6	4.5 0.7 4.1 1.4
3	1:03a 7:55a Tue 2:25p 7:47p	16.1 0.5 13.4 5.6	4.9 0.2 4.1 1.7	18	1:13a 8:01a Wed 2:27p 7:47p	14.4 2.2 12.4 6.3	4.4 0.7 3.8 1.9	3	2:33a 9:01a Fri 3:24p 9:11p	15.5 1.3 14.3 4.2	4.7 0.4 4.4 1.3	18	2:16a 8:38a Sat 2:56p 8:48p	14.9 2.1 14.1 4.0	4.5 0.6 4.3 1.2
4	1:55a 8:41a Wed 3:10p 8:38p	16.2 0.3 13.8 5.3	4.9 0.1 4.2 1.6	19	1:52a 8:35a Thu 2:59p 8:26p	14.7 1.8 12.8 5.9	4.5 0.5 3.9 1.8	4	3:17a 9:38a Sat 4:01p 9:54p	15.1 1.9 14.4 4.2	4.6 0.6 4.4 1.3	19	2:57a 9:11a Sun 3:29p 9:29p	14.8 2.3 14.6 3.5	4.5 0.7 4.5 1.1
5	2:44a 9:24a Thu 3:53p 9:28p	16.0 0.5 14.0 5.1	4.9 0.2 4.3 1.6	20	2:31a 9:08a Fri 3:32p 9:06p	14.8 1.7 13.2 5.5	4.5 0.5 4.0 1.7	5	3:59a 10:13a Sun 4:36p 10:38p	14.4 2.7 14.3 4.3	4.4 0.8 4.4 1.3	20	3:39a 9:46a Mon 4:04p 10:13p	14.6 2.7 14.9 3.2	4.5 0.8 4.5 1.0
6	3:32a 10:06a Fri 4:35p 10:17p	15.6 1.1 14.1 5.1	4.8 0.3 4.3 1.6	21	3:10a 9:41a Sat 4:06p 9:48p	14.7 1.9 13.6 4.1	4.6 0.5 4.1 1.6	6	4:41a 10:47a Mon 5:12p 11:22p	13.6 3.7 14.0 4.6	4.1 1.1 4.3 1.4	21	4:24a 10:22a Tue 4:42p 11:01p	14.0 3.5 15.0 3.2	4.3 1.1 4.6 1.0
7	4:18a 10:46a Sat 5:16p 11:07p	14.8 1.9 14.0 5.2	4.5 0.6 4.3 1.6	22	3:51a 10:15a Sun 4:40p 10:33p	14.4 2.2 13.9 4.8	4.4 0.7 4.2 1.5	7	5:25a 11:22a Tue 5:50p	12.6 4.7 13.7	3.8 1.4 4.2	22	5:13a 11:01a Wed 5:24p 11:54p	13.3 4.4 14.9 3.5	4.1 1.3 4.5 1.1
8	5:05a 11:25a Sun 5:58p	13.8 2.9 13.8	4.2 0.9 4.2	23	4:35a 10:50a Mon 5:17p 11:22p	13.8 2.9 14.1 4.7	4.2 0.9 4.3 1.4	8	12:11a 6:12a Wed 11:58a 6:31p	5.0 11.7 5.8 13.3	1.5 3.6 1.8 4.1	23	6:08a 11:46a Thu 6:13p	12.4 5.5 14.6	3.8 1.7 4.5
9	12:00a 5:54a Mon 12:05p 6:42p	5.4 12.7 4.0 13.5	1.6 3.9 1.2 4.1	24	5:23a 11:28a Tue 5:58p	13.1 3.7 14.2	4.0 1.1 4.3	9	1:05a 7:07a Thu 12:40p 7:18p	5.4 10.8 6.8 12.9	1.6 3.3 2.1 3.9	24	12:57a 7:15a Fri 12:41p 7:12p	3.8 11.6 6.5 14.1	1.2 3.5 2.0 4.3
10	12:56a 6:47a Tue 12:47p 7:29p	5.6 11.6 5.2 13.2	1.7 3.5 1.6 4.0	25	12:16a 6:18a Wed 12:11p 6:45p	4.6 12.3 4.7 14.2	1.4 3.8 1.4 4.3	10	2:11a 8:19a Fri 1:35p 8:15p	5.6 10.2 7.6 12.6	1.7 3.1 2.3 3.8	25	2:11a 8:39a Sat 1:55p 8:24p	4.1 11.1 7.2 13.8	1.3 3.4 2.2 4.2
11	1:59a 7:51a Wed 1:34p 8:20p	5.7 10.7 6.2 13.0	1.7 3.3 1.9 4.0	26	1:19a 7:24a Thu 1:02p 7:39p	4.5 11.4 5.7 14.2	1.4 3.5 1.7 4.3	11	3:25a 9:50a Sat 2:49p 9:21p	5.5 10.1 8.0 12.5	1.7 3.1 2.4 3.8	26	3:34a 10:10a Sun 3:25p 9:44p	4.0 11.2 7.4 13.8	1.2 3.4 2.3 4.2
12	3:08a 9:09a Thu 2:31p 9:15p	5.6 10.2 7.0 12.9	1.7 3.1 2.1 3.9	27	2:31a 8:45a Fri 2:06p 8:43p	4.3 10.9 6.5 14.2	1.3 3.3 2.0 4.3	12	4:34a 11:10a Sun 4:09p 10:26p	5.1 10.4 8.0 12.8	1.6 3.2 2.4 3.9	27	4:48a 11:22a Mon 4:47p 10:57p	3.5 11.8 6.9 14.1	1.1 3.6 2.1 4.3
13	4:16a 10:34a Fri 3:38p 10:11p	5.2 10.2 7.5 13.0	1.6 3.1 2.3 4.0	28	3:49a 10:15a Sat 3:24p 9:53p	3.8 10.9 7.0 14.4	1.2 3.2 2.1 4.4	13	5:31a 12:04p Mon 5:13p 11:21p	4.5 10.9 7.6 13.2	1.4 3.3 2.3 4.0	28	5:48a 12:17p Tue 5:51p 11:59p	3.0 12.6 6.1 14.5	0.9 3.8 1.9 4.4
14	5:15a 11:44a Sat 4:43p 11:03p	4.6 10.5 7.7 13.3	1.4 3.2 2.3 4.1	29	5:01a 11:32a Sun 4:43p 11:01p	3.1 11.4 6.9 14.7	0.9 3.5 2.1 4.5	14	6:16a 12:45p Tue 6:04p	3.7 11.6 7.0	1.1 3.5 2.1	29	6:37a 1:01p Wed 6:43p	2.5 13.3 5.1	0.8 4.1 1.6
15	6:05a 12:36p Sun 5:39p 11:50p	3.9 11.0 7.5 13.7	1.2 3.4 2.3 4.2	30	6:02a 12:33p Mon 5:51p	2.3 12.2 6.5	0.7 3.7 2.0	15	12:10a 6:55a Wed 1:20p 6:47p	13.7 3.1 12.2 6.2	4.2 0.7 3.9 1.9	30	12:51a 7:20a Thu 1:40p 7:29p	14.8 2.3 13.9 4.3	4.5 0.7 4.2 1.3
31	12:02a 6:54a Tue 1:23p 6:48p	15.2 1.6 12.9 5.8	4.6 0.5 3.9 1.8					31	1:38a 7:58a Fri 2:16p 8:11p	15.0 2.3 14.3 3.7	4.6 0.7 4.4 1.1				

LANGARA



September 2012 October

**L
A
N
G
A
R
A**

DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M
1 Sat	2:21a 8:33a 2:49p 8:50p	14.9 2.6 14.6 3.4	4.5 0.8 4.5 1.0	16 Sun	2:00a 8:04a 2:17p 8:27p	14.8 2.9 15.2 2.4	4.5 0.9 4.6 0.7	1 Mon	2:46a 8:34a 2:43p 9:04p	14.0 4.6 14.8 2.7	4.3 1.4 4.5 0.8	16 Tue	2:30a 8:10a 2:19p 8:52p	14.6 4.3 16.6 0.7	4.5 1.3 5.1 0.2
2 Sun	3:01a 9:06a 3:22p 9:28p	14.5 3.2 14.6 3.3	4.4 1.0 4.5 1.0	17 Mon	2:43a 8:40a 2:52p 9:09p	14.8 3.2 15.7 1.9	4.5 1.0 4.8 0.6	2 Tue	3:23a 9:04a 3:13p 9:39p	13.7 5.2 14.7 2.9	4.2 1.6 4.5 0.9	17 Wed	3:17a 8:51a 3:01p 9:39p	14.5 4.8 16.6 0.8	4.4 1.5 5.1 0.2
3 Mon	3:40a 9:38a 3:53p 10:07p	14.0 3.9 14.5 3.5	4.3 1.2 4.4 1.1	18 Tue	3:28a 9:17a 3:30p 9:54p	14.6 3.7 15.9 1.8	4.5 1.1 4.8 0.5	3 Wed	3:59a 9:35a 3:43p 10:15p	13.2 5.8 14.4 3.3	4.0 1.8 4.4 1.0	18 Thu	4:06a 9:36a 3:46p 10:28p	14.2 5.4 16.3 1.3	4.3 1.6 5.0 0.4
4 Tue	4:19a 10:09a 4:25p 10:46p	13.4 4.7 14.2 3.9	4.1 1.4 4.3 1.2	19 Wed	4:14a 9:56a 4:10p 10:43p	14.1 4.5 15.8 2.1	4.3 1.4 4.8 0.6	4 Thu	4:36a 10:06a 4:15p 10:53p	12.7 6.5 14.0 3.8	3.9 2.0 4.3 1.2	19 Fri	4:58a 10:25a 4:35p 11:22p	13.7 6.1 15.7 2.1	4.2 1.9 4.8 0.6
5 Wed	4:58a 10:41a 4:59p 11:28p	12.7 5.6 13.8 4.4	3.9 1.7 4.2 1.3	20 Thu	5:05a 10:39a 4:56p 11:37p	13.4 5.4 15.4 2.7	4.1 1.6 4.7 0.8	5 Fri	5:17a 10:41a 4:51p 11:36p	12.2 7.2 13.5 4.5	3.7 2.2 4.1 1.4	20 Sat	5:56a 11:22a 5:31p	13.1 6.8 14.7	4.0 2.1 4.5
6 Thu	5:41a 11:16a 5:36p	11.9 6.5 13.3	3.6 2.0 4.1	21 Fri	6:02a 11:30a 5:49p	12.6 6.3 14.7	3.8 1.9 4.5	6 Sat	6:03a 11:22a 5:33p	11.6 7.8 12.9	3.5 2.4 3.9	21 Sun	12:22a 7:01a 12:34p 6:38p	3.0 12.7 7.3 13.8	0.9 3.9 2.2 4.2
7 Fri	12:16a 6:31a 11:56a 6:21p	5.0 11.2 7.3 12.8	1.5 3.4 2.2 3.9	22 Sat	12:39a 7:10a 12:34p 6:53p	3.4 12.0 7.1 13.9	1.0 3.7 2.2 4.2	7 Sun	12:27a 7:01a 12:18p 6:27p	5.0 11.2 8.3 12.3	1.5 3.4 2.5 3.8	22 Mon	1:29a 8:15a 1:59p 7:56p	3.8 12.5 7.4 13.0	1.2 3.8 2.3 4.0
8 Sat	1:14a 7:35a 12:50p 7:17p	5.5 10.6 8.0 12.3	1.7 3.2 2.4 3.8	23 Sun	1:53a 8:33a 1:59p 8:12p	4.0 11.7 7.5 13.4	1.2 3.6 2.3 4.1	8 Mon	1:30a 8:13a 1:37p 7:38p	5.5 11.0 8.5 11.9	1.7 3.4 2.6 3.6	23 Tue	2:42a 9:28a 3:26p 9:21p	4.4 12.8 6.9 12.6	1.3 3.9 2.1 3.8
9 Sun	2:26a 9:01a 2:09p 8:30p	5.7 10.4 8.4 12.1	1.7 3.2 2.6 3.7	24 Mon	3:14a 9:56a 3:33p 9:37p	4.2 11.9 7.3 13.2	1.3 3.6 2.2 4.0	9 Tue	2:41a 9:29a 3:08p 9:00p	5.6 11.3 8.1 11.8	1.7 3.4 2.5 3.6	24 Wed	3:50a 10:28a 4:37p 10:37p	4.8 13.3 5.9 12.6	1.5 4.1 1.8 3.8
10 Mon	3:42a 10:24a 3:39p 9:46p	5.5 10.7 8.2 12.2	1.7 3.3 2.5 3.7	25 Tue	4:26a 11:01a 4:48p 10:51p	4.1 12.6 6.4 13.4	1.3 3.8 2.0 4.1	10 Wed	3:48a 10:28a 4:20p 10:15p	5.4 11.9 7.2 12.1	1.6 3.6 2.2 3.7	25 Thu	4:49a 11:17a 5:33p 11:40p	4.9 13.8 4.9 12.8	1.5 4.2 1.5 3.9
11 Tue	4:46a 11:21a 4:49p 10:51p	5.0 11.3 7.5 12.7	1.5 3.4 2.3 3.9	26 Wed	5:24a 11:51a 5:46p 11:52p	3.8 13.3 5.4 13.7	1.2 4.1 1.6 4.2	11 Thu	4:43a 11:12a 5:14p 11:17p	4.9 12.7 5.9 12.7	1.5 3.9 1.8 3.9	26 Fri	5:39a 11:58a 6:19p	5.0 14.3 4.0	1.5 4.4 1.2
12 Wed	5:35a 12:02p 5:41p 11:45p	4.3 12.0 6.5 13.3	1.3 3.7 2.0 4.1	27 Thu	6:12a 12:32p 6:33p	3.7 13.9 4.4	1.1 4.2 1.3	12 Fri	5:30a 11:51a 6:00p	4.5 13.6 4.5	1.4 4.1 1.4	27 Sat	12:32a 6:21a 12:35p 6:59p	13.1 5.2 14.6 3.3	4.0 1.6 4.5 1.0
13 Thu	6:16a 12:37p 6:25p	3.7 12.8 5.4	1.1 3.9 1.6	28 Fri	12:43a 6:53a 1:09p 7:15p	14.0 3.6 14.4 3.6	4.3 1.1 4.4 1.1	13 Sat	12:10a 6:11a 12:27p 6:43p	13.4 4.2 14.6 3.2	4.1 1.3 4.5 1.0	28 Sun	1:16a 6:58a 1:08p 7:35p	13.3 5.4 14.9 2.7	4.1 1.6 4.5 0.8
14 Fri	12:32a 6:53a 1:10p 7:06p	13.9 3.2 13.7 4.3	4.2 1.0 4.2 1.3	29 Sat	1:28a 7:29a 1:42p 7:53p	14.1 3.8 14.7 3.0	4.3 1.2 4.5 0.9	14 Sun	12:58a 6:51a 1:03p 7:25p	14.0 4.0 15.4 2.0	4.3 1.2 4.7 0.6	29 Mon	1:56a 7:32a 1:39p 8:10p	13.4 5.7 15.0 2.4	4.1 1.7 4.6 0.7
15 Sat	1:16a 7:29a 1:43p 7:46p	14.4 2.9 14.5 3.2	4.4 0.9 4.4 1.0	30 Sun	2:08a 8:02a 2:13p 8:29p	14.1 4.2 14.8 2.7	4.3 1.3 4.5 0.8	15 Mon	1:44a 7:30a 1:40p 8:08p	14.4 4.1 16.1 1.1	4.4 1.3 4.9 0.3	30 Tue	2:33a 8:04a 2:09p 8:43p	13.4 6.0 15.0 2.4	4.1 1.8 4.6 0.7
												31 Wed	3:09a 8:36a 2:39p 9:17p	13.3 6.3 14.9 2.5	4.1 1.9 4.5 0.8



November 2012 December

DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M	DAY	TIME	FT	M
1	3:44a	13.1	4.0	16	2:58a	14.3	4.4	1	3:04a	13.0	4.0	16	3:33a	14.6	4.5
	9:07a	6.7	2.0		8:23a	5.9	1.8		8:23a	7.3	2.2		9:08a	5.9	1.8
Thu	3:10p	14.6	4.5	Fri	2:29p	16.6	5.1	Sat	2:22p	14.6	4.5	Sun	3:09p	15.9	4.8
	9:51p	2.8	0.9		9:16p	0.8	0.2		9:08p	2.8	0.9		9:46p	1.5	0.5
2	4:20a	12.8	3.9	17	3:49a	14.1	4.3	2	3:40a	12.9	3.9	17	4:20a	14.5	4.4
	9:40a	7.1	2.2		9:16a	6.3	1.9		9:01a	7.4	2.3		10:04a	6.0	1.8
Fri	3:43p	14.3	4.4	Sat	3:21p	15.8	4.8	Sun	2:58p	14.1	4.3	Mon	4:01p	14.8	4.5
	10:28p	3.3	1.0		10:07p	1.6	0.5		9:43p	3.2	1.0		10:32p	2.6	0.8
3	4:58a	12.5	3.8	18	4:43a	13.8	4.2	3	4:18a	12.8	3.9	18	5:09a	14.3	4.4
	10:17a	7.5	2.3		10:17a	6.7	2.0		9:44a	7.6	2.3		11:04a	6.2	1.9
Sat	4:19p	13.8	4.2	Sun	4:16p	14.8	4.5	Mon	3:38p	13.5	4.1	Tue	4:56p	13.6	4.1
	11:07p	3.9	1.2		11:00p	2.7	0.8		10:20p	3.7	1.1		11:18p	3.8	1.2
4	4:41a	12.1	3.7	19	5:41a	13.5	4.1	4	4:59a	12.8	3.9	19	6:00a	14.1	4.3
	10:00a	7.9	2.4		11:25a	6.9	2.1		10:36a	7.6	2.3		12:10p	6.3	1.9
Sun	3:59p	13.2	4.0	Mon	5:19p	13.7	4.2	Tue	4:25p	12.9	3.9	Wed	5:58p	12.4	3.8
	10:51p	4.4	1.3		11:57p	3.7	1.1		11:01p	4.3	1.3		☉		
5	5:31a	11.9	3.6	20	6:43a	13.4	4.1	5	5:45a	12.9	3.9	20	12:08a	5.0	1.5
	10:55a	8.2	2.5		12:42p	6.9	2.1		11:38a	7.5	2.3		6:55a	13.9	4.2
Mon	4:50p	12.5	3.8	Tue	6:31p	12.6	3.8	Wed	5:22p	12.2	3.7	Thu	1:22p	6.2	1.9
	11:41p	4.9	1.5	☉					11:48p	4.9	1.5		7:12p	11.4	3.5
6	6:28a	11.9	3.6	21	12:58a	4.7	1.4	6	6:36a	13.1	4.0	21	1:03a	6.2	1.9
	12:08p	8.2	2.5		7:46a	13.5	4.1		12:49p	7.0	2.1		7:52a	13.8	4.2
Tue	5:54p	11.9	3.6	Wed	2:02p	6.5	2.0	Thu	6:33p	11.6	3.5	Fri	2:36p	5.8	1.8
☉					7:52p	11.9	3.6	☉					8:37p	11.0	3.4
7	12:40a	5.3	1.6	22	2:02a	5.5	1.7	7	12:42a	5.5	1.7	22	2:07a	7.0	2.1
	7:31a	12.1	3.7		8:45a	13.7	4.2		7:29a	13.5	4.1		8:48a	13.9	4.2
Wed	1:30p	7.7	2.3	Thu	3:13p	5.7	1.7	Fri	2:01p	6.1	1.9	Sat	3:42p	5.2	1.6
	7:14p	11.6	3.5		9:13p	11.7	3.6		7:55p	11.3	3.4		9:59p	11.0	3.4
8	1:43a	5.5	1.7	23	3:04a	6.0	1.8	8	1:43a	6.1	1.9	23	3:12a	7.5	2.3
	8:28a	12.7	3.9		9:37a	14.0	4.3		8:24a	14.1	4.3		9:40a	14.0	4.3
Thu	2:43p	6.7	2.0	Fri	4:12p	4.8	1.5	Sat	3:08p	4.9	1.5	Sun	4:36p	4.5	1.4
	8:35p	11.6	3.5		10:22p	11.9	3.6		9:17p	11.5	3.5		11:03p	11.4	3.5
9	2:43a	5.5	1.7	24	3:59a	6.4	2.0	9	2:47a	6.4	2.0	24	4:12a	7.7	2.3
	9:18a	13.5	4.1		10:21a	14.3	4.4		9:17a	14.8	4.5		10:27a	14.2	4.3
Fri	3:42p	5.4	1.6	Sat	5:00p	4.0	1.2	Sun	4:07p	3.6	1.1	Mon	5:22p	3.8	1.2
	9:47p	12.1	3.7		11:18p	12.2	3.7		10:28p	12.1	3.7		11:53p	11.9	3.6
10	3:38a	5.5	1.7	25	4:47a	6.6	2.0	10	3:48a	6.5	2.0	25	5:02a	7.7	2.3
	10:03a	14.4	4.4		11:00a	14.6	4.5		10:09a	15.6	4.8		11:08a	14.5	4.4
Sat	4:33p	3.9	1.2	Sun	5:41p	3.3	1.0	Mon	5:01p	2.3	0.7	Tue	6:01p	3.2	1.0
	10:47p	12.8	3.9						11:28p	12.8	3.9				
11	4:28a	5.4	1.6	26	12:05a	12.5	3.8	11	4:45a	6.4	2.0	26	12:33a	12.3	3.8
	10:45a	15.3	4.7		5:28a	6.8	2.1		10:59a	16.3	5.0		5:44a	7.6	2.3
Sun	5:20p	2.5	0.8	Mon	11:36a	14.8	4.5	Tue	5:52p	1.2	0.4	Wed	11:47a	14.7	4.5
	11:41p	13.4	4.1		6:18p	2.8	0.9						6:37p	2.7	0.8
12	5:15a	5.3	1.6	27	12:46a	12.8	3.9	12	12:22a	13.4	4.1	27	1:09a	12.7	3.9
	11:27a	16.1	4.9		6:06a	6.9	2.1		5:39a	6.3	1.9		6:22a	7.4	2.3
Mon	6:06p	1.3	0.4	Tue	12:10p	15.0	4.6	Wed	11:49a	16.9	5.2	Thu	12:23p	14.9	4.5
					6:53p	2.5	0.8		6:41p	0.4	0.1		7:11p	2.4	0.7
13	12:31a	13.9	4.2	28	1:22a	13.0	4.0	13	1:12a	14.0	4.3	28	1:41a	13.0	4.0
	6:00a	5.3	1.6		6:40a	7.0	2.1		6:31a	6.1	1.9		6:58a	7.2	2.2
Tue	12:10p	16.8	5.1	Wed	12:43p	15.0	4.6	Thu	12:39p	17.2	5.2	Fri	12:58p	15.1	4.6
☉	6:52p	0.5	0.2	☉	7:27p	2.3	0.7	☉	7:28p	0.1	0.0	☉	7:44p	2.2	0.7
14	1:20a	14.3	4.4	29	1:56a	13.1	4.0	14	2:00a	14.4	4.4	29	2:13a	13.2	4.0
	6:46a	5.4	1.6		7:14a	7.0	2.1		7:22a	5.9	1.8		7:33a	7.0	2.1
Wed	12:54p	17.1	5.2	Thu	1:15p	15.0	4.6	Fri	1:28p	17.1	5.2	Sat	1:33p	15.0	4.6
	7:39p	0.1	0.0		8:00p	2.3	0.7		8:15p	0.2	0.1		8:16p	2.2	0.7
15	2:09a	14.4	4.4	30	2:30a	13.1	4.0	15	2:47a	14.5	4.4	30	2:44a	13.4	4.1
	7:33a	5.6	1.7		7:48a	7.1	2.2		8:14a	5.8	1.8		8:10a	6.8	2.1
Thu	1:41p	17.0	5.2	Fri	1:48p	14.9	4.5	Sat	2:18p	16.7	5.1	Sun	2:08p	14.8	4.5
	8:27p	0.2	0.1		8:34p	2.5	0.8		9:01p	0.7	0.2		8:47p	2.4	0.7
												31	3:17a	13.5	4.1
												Mon	8:48a	6.7	2.0
													2:45p	14.5	4.4
													9:19p	2.8	0.9

LANGARA

