

## APPENDIX E: TIDE NOTES

See Appendix F for the NOAA Memorandum of August 4, 1998 changing the tide zones and the tide stations to be used.

All data, including tides, were annotated with Coordinated Universal Time (UTC). Tidal heights for Sabine Offshore, 877-1081, were downloaded from the NOAA/CO-OPS web page. Correctors for each zone were created using the Create Correctors routine in the **iss2000 Survey Analysis** software. Correctors were then applied to the multibeam data files using the Process/Correctors/Tides routine in the **iss2000 Survey Analysis** software. When it is necessary to apply different tide correctors such as verified tides to replace preliminary tides, the program removes the previous tide corrector and applies the new corrector. Each time a routine is run on the **gsf** multibeam data file, a history record is written at the end of the file.

The on-line times for acquisition of valid hydrographic data are presented in Table App. E-1.

*Table App. E-1. Abstract of Times of Hydrography*

1999/314	02:39:37.02	1999/314	02:43:10.02	1999/314	02:52:48.05	1999/314	02:58:09.03
1999/314	03:06:51.03	1999/314	03:12:33.62	1999/314	03:25:41.03	1999/314	03:32:25.02
1999/314	03:41:19.02	1999/314	03:50:04.02	1999/314	03:57:26.07	1999/314	04:07:21.02
1999/314	04:16:02.03	1999/314	04:28:16.02	1999/314	04:35:58.01	1999/314	04:49:17.03
1999/314	04:58:00.02	1999/314	05:13:03.03	1999/314	05:20:43.02	1999/314	05:37:43.01
1999/314	05:45:55.02	1999/314	06:04:21.03	1999/314	06:11:58.02	1999/314	06:32:06.02
1999/314	06:40:19.02	1999/314	07:03:01.07	1999/314	07:10:43.03	1999/314	07:34:04.02
1999/314	07:42:17.06	1999/314	08:07:33.03	1999/314	08:15:12.01	1999/314	08:41:58.11
1999/314	08:50:00.01	1999/314	09:17:11.03	1999/314	10:05:50.02	1999/314	10:33:27.03
1999/314	10:41:19.02	1999/314	11:08:07.03	1999/314	11:15:37.02	1999/314	11:43:28.06
1999/314	11:51:04.03	1999/314	12:17:34.02	1999/314	12:25:28.03	1999/314	12:53:26.03
1999/314	13:02:41.02	1999/314	13:29:03.02	1999/314	13:40:42.03	1999/314	14:08:44.01
1999/314	14:32:06.03	1999/314	15:09:20.06	1999/314	15:30:20.03	1999/314	16:05:44.02
1999/314	16:10:39.01	1999/314	16:49:13.03	1999/314	16:56:54.03	1999/314	17:32:36.02
1999/314	17:38:07.03	1999/314	18:17:40.05	1999/314	18:25:47.07	1999/314	19:01:43.07
1999/314	19:06:44.03	1999/314	19:46:49.03	1999/314	19:56:43.02	1999/314	20:33:14.02
1999/314	20:38:06.02	1999/314	21:18:49.08	1999/314	21:42:34.02	1999/314	21:50:58.61
1999/314	21:53:53.02	1999/314	21:54:34.15	1999/314	21:59:10.03	1999/314	22:36:43.02
1999/314	22:42:25.01	1999/314	23:27:40.02	1999/314	23:32:20.02	1999/315	00:11:04.03
1999/315	00:16:16.03	1999/315	01:01:35.02	1999/315	01:06:25.03	1999/315	01:46:03.03
1999/315	01:51:19.02	1999/315	02:37:05.01	1999/315	03:04:43.01	1999/315	03:45:20.02
1999/315	03:50:54.01	1999/315	04:37:34.01	1999/315	04:45:40.06	1999/315	05:31:16.01
1999/315	05:37:06.02	1999/315	06:24:16.02	1999/315	06:31:52.02	1999/315	07:18:08.01
1999/315	07:23:55.02	1999/315	08:11:30.02	1999/315	08:19:12.02	1999/315	09:06:02.02
1999/315	09:25:38.04	1999/315	10:14:11.02	1999/315	10:21:51.02	1999/315	11:09:01.02
1999/315	11:14:12.02	1999/315	11:15:02.22	1999/315	11:22:18.02	1999/315	11:22:44.72
1999/315	11:31:01.02	1999/315	12:25:22.02	1999/315	12:30:34.05	1999/315	13:17:55.02
1999/315	13:23:02.03	1999/315	14:18:32.03	1999/315	14:23:11.03	1999/315	15:10:23.02
1999/315	15:15:22.03	1999/315	16:12:21.03	1999/315	16:28:35.02	1999/315	17:15:40.02
1999/315	17:20:51.03	1999/315	18:20:17.03	1999/315	18:27:41.01	1999/315	19:19:27.02
1999/315	19:25:18.01	1999/315	20:25:43.08	1999/315	20:33:45.02	1999/315	21:37:40.02
1999/315	21:42:45.03	1999/315	22:43:06.02	1999/315	23:01:55.03	1999/315	23:54:58.07
1999/316	00:00:15.02	1999/316	00:59:53.02	1999/316	01:07:57.07	1999/316	02:02:39.02
1999/316	02:08:34.17	1999/316	03:12:19.06	1999/316	03:18:36.02	1999/316	04:14:31.06
1999/316	04:19:34.02	1999/316	05:23:16.03	1999/316	05:46:10.34	1999/316	06:44:00.80
1999/316	06:50:45.46	1999/316	07:03:41.41	1999/316	07:08:58.19	1999/316	08:14:12.30

1999/316	08:19:07.38	1999/316	09:16:43.33	1999/316	09:21:55.37	1999/316	10:28:44.39
1999/316	10:36:41.26	1999/316	10:38:50.56	1999/316	10:48:07.76	1999/316	11:50:25.36
1999/316	11:56:15.37	1999/316	13:04:34.28	1999/316	13:25:18.36	1999/316	14:28:06.32
1999/316	14:33:38.35	1999/316	15:44:34.36	1999/316	15:52:17.30	1999/316	16:55:33.37
1999/316	17:01:39.37	1999/316	18:13:53.46	1999/316	20:44:14.38	1999/316	21:52:23.24
1999/316	22:03:46.31	1999/316	23:26:24.33	1999/316	23:31:50.37	1999/317	00:40:39.33
1999/317	00:46:26.30	1999/317	02:06:29.38	1999/317	02:30:16.31	1999/317	03:40:35.27
1999/317	03:46:21.29	1999/317	05:05:27.35	1999/317	05:07:23.50	1999/317	05:09:23.33
1999/317	05:07:23.50	1999/317	05:09:43.04	1999/317	05:23:26.42	1999/317	06:34:43.41
1999/317	06:40:15.34	1999/317	08:00:31.34	1999/317	08:20:31.29	1999/317	09:37:31.33
1999/317	09:43:45.29	1999/317	11:05:49.31	1999/317	11:14:08.42	1999/317	12:31:29.32
1999/317	12:37:40.24	1999/317	14:01:33.14	1999/317	15:02:43.33	1999/317	15:51:01.13
1999/317	16:10:29.90	1999/317	17:05:57.32	1999/317	17:12:05.30	1999/317	18:39:02.27
1999/317	18:47:25.33	1999/317	20:03:31.39	1999/317	20:09:32.40	1999/317	21:43:50.36
1999/317	22:05:50.27	1999/317	23:22:21.32	1999/317	23:28:09.27	1999/318	00:58:59.34
1999/318	01:05:32.31	1999/318	02:26:46.29	1999/318	02:32:46.31	1999/318	04:02:18.35
1999/318	04:25:33.41	1999/318	05:48:28.30	1999/318	05:54:12.33	1999/318	07:25:00.42
1999/318	07:33:26.32	1999/318	09:00:59.39	1999/318	09:07:21.38	1999/318	10:39:15.33
1999/318	10:57:38.37	1999/318	12:26:18.32	1999/318	12:32:37.39	1999/318	14:11:56.29
1999/318	14:20:29.32	1999/318	15:47:03.32	1999/318	15:53:31.32	1999/318	17:36:55.39
1999/318	17:56:09.37	1999/318	19:21:25.32	1999/318	19:28:27.23	1999/318	21:18:10.34
1999/318	21:23:09.38	1999/318	22:48:18.43	1999/318	22:53:44.46	1999/319	00:40:27.38
1999/319	01:06:16.34	1999/319	02:36:57.48	1999/319	02:43:16.41	1999/319	04:24:15.34
1999/319	04:30:25.33	1999/319	06:04:25.43	1999/319	06:10:08.26	1999/319	07:48:21.32
1999/319	08:07:13.32	1999/319	09:47:39.30	1999/319	09:53:36.36	1999/319	11:33:05.40
1999/319	11:41:40.41	1999/319	13:21:09.31	1999/319	13:40:25.33	1999/319	15:21:36.42
1999/319	15:41:56.40	1999/319	17:21:55.40	1999/319	17:27:40.35	1999/319	19:10:41.31
1999/319	19:30:08.35	1999/319	21:08:23.30	1999/319	21:13:37.34	1999/319	23:02:08.36
1999/319	23:07:02.48	1999/320	00:44:22.36	1999/320	00:50:36.37	1999/320	02:38:13.37
1999/320	03:01:04.32	1999/320	04:41:45.31	1999/320	04:47:09.30	1999/320	06:33:42.45
1999/320	06:39:53.43	1999/320	08:22:32.36	1999/333	20:42:57.39	1999/333	22:26:17.33
1999/333	22:33:28.31	1999/334	00:09:25.32	1999/334	00:16:33.33	1999/334	01:57:15.35
1999/334	02:17:09.33	1999/334	03:56:30.32	1999/334	04:03:07.31	1999/334	05:06:06.96
1999/334	02:30:53.25	1999/340	04:33:23.35	1999/340	04:44:27.35	1999/340	07:35:39.29
1999/340	08:13:08.47	1999/340	10:20:26.34	1999/340	10:31:06.20	1999/340	12:24:17.52
1999/340	12:30:28.77	1999/340	13:05:55.34	1999/340	13:12:34.40	1999/340	14:37:05.58
1999/340	14:43:06.57	1999/340	15:34:01.31	1999/340	15:57:10.38	1999/340	18:03:23.37
1999/340	18:10:01.24	1999/340	19:41:41.01	1999/340	18:10:01.24	1999/340	20:22:15.25
1999/340	20:30:58.34	1999/340	22:32:28.29	1999/340	22:54:18.31	1999/341	00:41:34.34
1999/341	00:52:22.19	1999/341	02:39:52.39	1999/341	02:47:26.36	1999/341	04:31:48.32
1999/341	05:00:07.26	1999/341	06:40:17.30	1999/341	06:46:46.37	1999/341	08:33:16.23
1999/341	08:38:40.35	1999/341	10:20:09.33	1999/341	10:26:40.31	1999/341	12:14:47.24
1999/341	12:14:49.32	1999/341	12:14:50.39	1999/341	12:49:18.70	1999/341	12:51:51.35
1999/341	12:57:27.45	1999/341	12:59:38.33	1999/341	13:00:52.44	1999/341	13:00:54.57
1999/341	13:05:57.88	1999/341	13:06:31.35	1999/341	13:27:56.30	1999/341	13:29:49.29
1999/341	13:41:31.28	1999/341	13:44:57.31	1999/341	14:06:06.51	1999/341	14:07:16.29
1999/341	14:11:40.32	1999/341	14:15:51.24	1999/341	14:21:57.33	1999/341	14:23:46.28
1999/341	14:36:52.34	1999/341	14:38:50.31	1999/341	14:50:21.25	1999/341	14:52:37.38
1999/341	15:01:58.19	1999/341	15:05:14.22	1999/341	15:14:28.29	1999/341	15:15:49.22
1999/341	15:24:00.50	1999/341	15:33:16.34	1999/341	15:39:31.46	1999/341	15:41:34.36
1999/341	16:11:27.45	1999/341	16:17:40.30	1999/341	16:23:48.68	1999/341	16:27:46.30
1999/341	16:32:42.51	1999/341	16:38:37.31	1999/341	16:43:21.36	1999/341	16:45:09.37
1999/341	16:53:50.34	1999/341	17:00:47.34	1999/341	17:07:27.37	1999/341	17:13:26.24
1999/341	17:20:34.38	1999/341	17:23:47.32	1999/341	17:32:27.26	1999/341	17:35:19.34
1999/341	17:42:50.38	1999/341	17:48:55.34	1999/341	17:55:04.33	1999/341	18:00:18.62
1999/341	18:09:56.19	1999/341	18:27:10.42	1999/341	18:36:04.44	1999/341	18:46:56.38

1999/341	18:53:53.38	1999/341	18:59:40.29	1999/341	19:05:24.33	1999/341	19:07:09.23
1999/341	19:12:39.24	1999/341	19:15:10.23	1999/341	19:25:08.24	1999/341	19:27:51.30
1999/341	19:32:01.18	1999/341	19:33:57.30	1999/341	19:49:08.30	1999/341	19:51:26.25
1999/341	19:56:52.44	1999/341	19:57:33.30	1999/341	20:07:18.30	1999/341	20:18:48.28
1999/341	20:31:23.30	1999/341	20:33:25.32	1999/341	20:43:57.24	1999/341	20:53:17.24
1999/341	21:00:16.37	1999/341	21:11:06.27	1999/341	21:00:16.37	1999/342	00:14:53.28
1999/342	00:21:45.36	1999/342	00:48:12.37	1999/342	00:55:50.39	1999/342	01:22:24.43
1999/342	01:29:25.30	1999/342	01:55:56.35	1999/342	02:02:35.29	1999/342	02:29:07.28
1999/342	02:35:47.31	1999/342	03:02:32.30	1999/342	03:09:23.31	1999/342	03:35:59.30
1999/342	03:42:28.39	1999/342	04:09:25.30	1999/342	04:24:41.34	1999/342	04:51:25.17
1999/342	04:58:02.48	1999/342	05:25:21.28	1999/342	05:31:46.38	1999/342	05:58:51.38
1999/342	06:05:49.34	1999/342	06:33:08.34	1999/342	06:39:37.27	1999/342	07:06:57.33
1999/342	07:13:57.25	1999/342	07:42:29.36	1999/342	07:49:24.37	1999/342	08:16:56.36
1999/342	08:23:51.34	1999/342	08:45:09.94	1999/342	08:51:07.82	1999/342	08:58:47.36
1999/342	09:08:33.31	1999/342	09:36:22.29	1999/342	09:43:05.10	1999/342	10:09:28.30
1999/348	20:49:33.37	1999/348	22:29:19.35	1999/348	22:42:49.31	1999/348	22:43:22.36
1999/348	22:53:21.37	1999/348	22:54:29.34	1999/348	23:28:01.35	1999/348	23:29:08.29
1999/348	23:51:57.35	1999/348	23:53:29.36	1999/349	00:21:03.37	1999/349	00:22:17.43
1999/349	00:44:24.38	1999/349	01:59:06.32	1999/349	02:10:16.37	1999/349	03:57:25.31
1999/352	00:56:31.2	1999/352	01:29:36.3	1999/352	01:37:45.3	1999/352	02:10:02.4
1999/352	02:19:56.4	1999/352	02:21:30.3	1999/352	02:41:44.3	1999/352	02:43:56.3
1999/352	02:58:22.3	1999/352	02:58:51.3	1999/352	03:10:03.3	1999/352	03:10:38.3

#### **APPENDIX F: SUPPLEMENTAL CORRESPONDENCE**

NOAA Memorandum: Final Water Level Data for Application to Hydrographic Survey  
 OPR-K171-KR-1998, eight pages follow.