

***Appendix E – Information on Sightings Recorded
by U.S. Navy MMOs on Vessels during Sonar Test Events in the
NSWC PCD Study Area***

THIS PAGE INTENTIONALLY BLANK

Table E-1. Information on Sightings Recorded by U.S. Navy MMOs on Vessels during Sonar Test Events in the NSWC PCD Study Area.

	Sighting 1	Sighting 2	Sighting 3	Sighting 4	Sighting 5	Sighting 6	Sighting 7	Sighting 8
Map ID	1	1	1	2	1	1	2	1
Sighting Information								
Date	12/6/10	1/20/11	2/9/11	2/9/11	4/13/11	4/14/11	4/14/11	4/21/11
Time	14:27	11:17	11:33	13:33	10:31	11:08	12:59	10:26
Location	W-151B-1	W-151B-1	W-151B-1	W-151B-1	W-151B-1	W-151B-1	W-151B-1	W-151B-1
Detection sensor	Visual	Visual	Visual	Visual	Visual	Visual	Visual	Visual
Species/group	Unid ST	DC	TT	SD/TT	DC	SD/TT	SD/TT	SD/SF
Group size	1	1	1	5	1	6	2	6
# calves	N/A	N/A	0	0	N/A	0	0	0
Behavior	Resting at surface	Resting at surface	Bow riding	Bow riding	Traveling	Traveling	Breaching/ jumping	Traveling
Animal bearing (true)	-	-	-	-	-	-	-	-
Animal motion relative to ship	-	-	-	-	-	-	-	-
Distance from ship	-	-	-	-	-	-	-	-
Length of contact	1 minute (min)	< 1 min	< 1 min	< 1 min	< 1 min	< 1 min	< 1 min	< 1 min
Environmental Information								
Wave height	3-5 feet (ft)	1-2 ft	2-3 ft	2-3 ft	1-2 ft	0-1 ft	0-1 ft	2-3 ft
Visibility	-	-	-	-	-	-	-	-
Beaufort Sea State (BSS)	-	-	-	-	-	-	-	-
Operational Information								
Active sonar in use?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bearing of ship	-	-	-	-	-	-	-	-
Mitigation implemented	During mission	During mission	Pre-Mission	During Mission	During Mission	During Mission	Post-Mission	During Mission
Comments	No effect	No effect	No effect	No effect	No effect	Possible take	No effect	Possible take

Table E-1 (Continued). Information on Sightings Recorded by U.S. Navy MMOs on Vessels during Sonar Test Events in the NSWC PCD Study Area.

	Sighting 9	Sighting 10	Sighting 11	Sighting 12	Sighting 13	Sighting 14	Sighting 15	Sighting 16
Map ID					2	1	2	1
Sighting Information								
Date	4/22/11	4/22/11	4/22/11	5/5/11	5/5/11	5/9/11	5/9/11	5/25/11
Time	10:26	11:56	12:39	13:03	13:25	13:08	13:55	12:39
Location	W-151B-1	W-151B-1	W-151B-1	W-151B-1		W-151B-1	W-151B-1	W-151B-1
Detection sensor					Visual	Visual	Visual	Visual
Species/group	SF	SD/SF	SD/SF	SF	SD/SF	Unid SD	SD/TT	SD/SF
Group size	1	10	2	1	7	16	2	3
# calves	0	2	0	0	2	1	0	1
Behavior	Bow riding	Traveling	Bow riding	Traveling	Bow riding	Bow riding	Traveling	Bow riding
Animal bearing (true)	-	-	-	-	-	-	-	-
Animal motion relative to ship	-	-	-	-	-	-	-	-
Distance from ship	-	-	-	-	-	-	-	-
Length of Contact	< 1 min	< 1 min	< 1 min	< 1 min	< 1 min	1 – 5 min	< 1 min	< 1 min
Environmental Information								
Wave height	1-2 ft	1-2 ft	1-2 ft	2-3 ft	2-3 ft	1-2 ft	1-2 ft	1-2 ft
Visibility	-	-	-	-	-	-	-	-
BSS	-	-	-	-	-	-	-	-
Operational Information								
Active sonar in use?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bearing of ship	-	-	-	-	No	No	No	No
Mitigation implemented	During Mission	During Mission	Post-Mission Survey	During Mission				
Comments	No effect	Possible take	No effect	Possible take	No effect	No effect	Possible take	No effect

Table E-1 (Continued). Information on Sightings Recorded by U.S. Navy MMOs on Vessels during Sonar Test Events in the NSWC PCD Study Area.

	Sighting 17	Sighting 18	Sighting 19	Sighting 20	Sighting 21	Sighting 22	Sighting 23	Sighting 24
Map ID	1	2	3	4	1	2	3	1
Sighting Information								
Date	6/6/11	6/6/11	6/6/11	6/6/11	6/16/11	6/16/11	6/16/11	7/6/11
Time	12:19	12:38	12:56	13:06	11:00	11:37	11:43	13:16
Location	W-151B-1	W-151B-1	W-151B-1	W-151B-1	W-151B-1	W-151B-1	W-151B-1	W-151B-1
Detection sensor	Visual	Visual	Visual	Visual	Visual	Visual	Visual	Visual
Species/group	SD/SF	Unid SD	SD/SF	SD/SF	SF	SD/SF	SF	Unid SD
Group size	3	12	8	8	1	4	1	4
# calves	0	0	0	0	0	0	0	0
Behavior	Traveling & bow riding	Traveling	Traveling	Breaching/ jumping	Resting at surface			
Animal bearing (true)	-	-	-	-	-	-	-	-
Animal motion relative to ship	340°	080°	130°	135°	-	-	-	-
Distance from ship	50 yds	40 yds	-	50 yds	-	-	-	-
Length of contact	1 min	< 1 min	< 1 min	< 1 min	< 1 min	< 1 min	< 1 min	< 1 min
Environmental Information								
Wave height	-	1-2 ft	1-2 ft	1-2 ft	2-3 ft	2-3 ft	2-3 ft	Flat calm
Visibility	-	-	-	-	-	-	-	-
BSS	-	-	-	-	-	-	-	-
Operational Information								
Active sonar in use?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bearing of ship	-	-	-	-	-	-	-	-
Mitigation implemented	During Mission	During Mission	During Mission	During Mission	During Mission	During Mission	During Mission	During Mission
Comments	No effect	No effect	No effect	No effect	Possible take	Possible take	Possible take	Possible take

Table E-1 (Continued). Information on Sightings Recorded by U.S. Navy MMOs on Vessels during Sonar Test Events in the NSWC PCD Study Area.

	Sighting 25	Sighting 26	Sighting 27	Sighting 28	Sighting 29	Sighting 30
Map ID	2	3	1	2	3	1
Sighting Information						
Date	7/6/11	7/6/11	7/8/11	7/8/11	7/8/11	7/22/11
Time	13:32	14:27	10:21	10:22	10:25	11:10
Location	W-151B-1	W-151B-1	W-151B-1	W-151B-1	W-151B-1	W-151B-1
Detection sensor	Visual	Visual	Visual	Visual	Visual	Visual
Species/group	Unid ST	CM	SD/SF	SD/SF	SF	SD/SF
Group Size	1	1	2	2	1	6
# calves	N/A	N/A	0	0	0	0
Behavior	Resting at surface	Resting at surface	Traveling	Bow riding	Bow riding	Bow riding
Animal bearing (true)	-	-	-	-	-	-
Animal motion relative to ship	-	-	-	-	-	-
Distance from ship	-	-	-	-	-	-
Length of contact	< 1 min	< 1 min	< 1 min	< 1 min	< 1 min	< 1 min
Environmental Information						
Wave height	Flat calm	Flat calm	2-3 ft	2-3 ft	2-3 ft	0-1 ft
Visibility	-	-	-	-	-	-
BSS	-	-	-	-	-	-
Operational Information						
Active sonar in use?	Yes	Yes	Yes	Yes	Yes	Yes
Bearing of ship	-	-	-	-	-	-
Mitigation implemented	During Mission	During Mission	During Mission	During Mission	During Mission	During Mission
Comments	No effect	No effect	Possible take	No effect	No effect	No effect

Key: - = Data not collected/available; ° = degrees; SD = Schooling dolphins; CC = Loggerhead turtle (*Caretta caretta*); CM = Green turtle (*Chelonia mydas*); DC = Leatherback turtle (*Dermochelys coriacea*); N/A=not applicable; Unid ST = Unidentified sea turtle; TT = Bottlenose dolphin (*Tursiops truncatus*); SF = Atlantic spotted dolphin (*Stenella frontalis*); Unid SD = unidentified schooling dolphins

NOTE: All sightings occurred during AQS-20 testing. MMO activities were conducted on the following dates, but no sightings occurred: November 23, 2010; December 2-3, 2010; December 21, 2010; March 1, 2011; April 20, 2011; May 3, 2011; May 6, 2011; May 16, 2011; May 26, 2011; July 1, 2011; July 5, 2011; July 7, 2011; July 25, 2011