 SANTA BARBARA CHANNEL

## 2014 Gray whales (northbound) Sighting + Tracking, On Effort



This report presents all sightings and tracking of all northbound Gray whales, on-effort. Any voided or off-effort sightings have been removed.

We conduct our survey, most days 9 AM to 5 PM every day for approximately one hundred consecutive days from mid-February to towards the end of May. In 2014 we began February 10 and continued for 107 consecutive days through May 27.

The survey team - Counters - consists of the Project Coordinator, two Research Assistants, and an array of volunteer Observers. This year's Counters was a remarkable group with $49 \%$ having participated in at least 5 consecutive surveys. That is a huge effort, an amazing resource for Gray Whales. They Count.

Observers work scheduled 2-hour shifts, Research Assistants 4-hour shifts, and the Project Coordinator is always at Counter Point. Research Assistants and the Project Coordinator gather data and direct observation.

The viewing platform is two, four-foot by four-foot picnic tables on which two Supervisors are positioned. The remainder of the observation team stands on benches or the ground in front of the tables. Observers use Fijinon and Baker Marine $7 \times 50$ binoculars with a built-in reticle scale and compass. All of the five pairs are within $1^{\circ}$ of standard. For species identification of distant animals and for identifying names and numbers of vessels, we use a Zeiss spotting scope.

Data are entered in pencil on paper datasheets, designed by Gray Whales Count. Datasheets and entry guides are available for download, the last report in this group.

Report Key: Quality is overall observation quality; The number with Beaufort corresponds to the Beaufort scale; Position of the sighting is represented by true bearing, with distance in meters from our observation platform, which faces south. Our eye-height is 13.56 meters (about 44.5 feet).
part of 2014 Gray Whales Count, Survey Report © Gray Whales Count, 2016 prepared by Michael H Smith, Project Coordinator, Gray Whales Count, Santa Barbara, California, USA.

[^0]Gray whale (northbound) Eschrichtius robustus
Total: 1,036 Calves: $226 \quad$ Number of Sightings: 468



2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  | Sighting Number 28 | Quality: Poor <br> Beaufort: 1 | Total 5-0 Calves at sighting |
| :---: | :---: | :---: | :---: |
|  |  | 12:25-PST | Saw: Blow |
|  |  | 20:25-GMT | Position: $146^{\circ}$ / 5027 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:37-PST | Saw: Blow |
|  |  | 20:37-GMT | Position: $159^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:43-PST | Saw: Blow |
|  |  | 20:43-GMT | Position: $163^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Fluke $\bullet$ Traveling |
|  |  | 12:46-PST | Saw: Blow |
|  |  | 20:46-GMT | Position: $166^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  | 12:53-PST | Saw: Blow |
|  |  | 20:53-GMT | Position: 172 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:56-PST | Saw: Blow |
|  |  | 20:56-GMT | Position: $177^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:58-PST | Saw: Body |
|  |  | 20:58-GMT | Position: 179 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:04-PST | Saw: Blow |
|  |  | 21:04-GMT | Position: $187^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:21-PST | Saw: Body |
|  |  | 20:21-GMT | Position: $216^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 13:24-PST | Saw: Body |
|  |  | 21:24-GMT | Position: $220^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:27-PST | Saw: Blow |
|  |  | 21:27-GMT | Position: $224^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke - |
|  |  | 13:37-PST | Saw: Blow Route past Holly: Outside |
|  |  | 21:37-GMT | Position: $230^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | Sighting Number 31 | Quality: Poor Beaufort: 1 | Total 4-0 Calves at sighting |
|  |  | 12:51-PST | Saw: Blow |
|  |  | 20:51-GMT | Position: $161^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:59 -PST | Saw: Blow |
|  |  | 20:59-GMT | Position: $166^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:01-PST | Saw: Blow |
|  |  | 21:01-GMT | Position: $170^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  | 13:16-PST | Saw: Blow |
|  |  | 21:16-GMT | Position: 184/ 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:20-PST | Saw: Blow |
|  |  | 21:20-GMT | Position: 191 / 5027 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:26-PST | Saw: Blow Route past Holly: Outside |
|  |  | 21:26-GMT | Position: 195 / 5027 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | Sighting Number 47 | Quality: Poor <br> Beaufort: 1 | Total $2-0$ Calves at sighting |
|  |  | 15:59-PST | Saw: Blow |
|  |  | 23:59-GMT | Position: 208 / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 16:03-PST | Saw: Blow |
|  |  | 0:03; 2/16/2014-GMT | Position: $210^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 16:12-PST | Saw: Blow Route past Holly: Outside |
|  |  | 0:12; 2/16/2014-GMT | Position: $219^{\circ} / 3528$ m Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |
| Feb 17 | Day 8 of 107 | Gray whale (northbound) |  |
|  | Sighting Number 03 | Quality: Poor Beaufort: 0 | Total 1 - 0 Calves at sighting |
|  |  | 13:06-PST | Saw: Blow |
|  |  | 21:06-GMT | Position: 102 / 2749 m Direction: West; Behavior: Speed slow • Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  | Sighting Number | 14 | Quality: Fair Beaufort: 3 | Total 1 - 0 Calves at sighting |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 12:33-PST | Saw: Blow |
|  |  |  | 20:33-GMT | Position: $131^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 12:40-PST | Saw: Blow |
|  |  |  | 20:40-GMT | Position: $135^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |
|  |  |  | 12:49-PST | Saw: Blow |
|  |  |  | 20:49-GMT | Position: $139^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 12:53-PST | Saw: Blow |
|  |  |  | 20:53-GMT | Position: $157^{\circ} / 1403 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  |  | 12:59-PST | Saw: Blow |
|  |  |  | 20:59-GMT | Position: 193 / 2749 m Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 13:16-PST | Saw: Blow Route past Holly: Inside |
|  |  |  | 21:16-GMT | Position: $223^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | Sighting Number | 16 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  |  |  | Beaufort: 3 |  |
|  |  |  | 13:03-PST | Saw: Blow |
|  |  |  | 21:03-GMT | Position: 177 / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 13:07-PST | Saw: Blow |
|  |  |  | 21:07-GMT | Position: 191 / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 13:13-PST | Saw: Blow |
|  |  |  | 21:13-GMT | Position: $234^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  |  | 13:21-PST | Saw: Blow Route past Holly: Inside |
|  |  |  | 21:21-GMT | Position: $239^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | Sighting Number | 17 | Quality: Fair | Total 2 - 0 Calves at sighting |
|  |  |  | Beaufort: 3 |  |
|  |  |  | 13:10-PST | Saw: Blow |
|  |  |  | 21:10-GMT | Position: $231^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  |  | 13:16-PST | Saw: Blow |
|  |  |  | 21:16-GMT | Position: $235^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  |  | 13:18-PST | Saw: Blow |
|  |  |  | 21:18-GMT | Position: $238^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  |  | 13:20-PST | Saw: Blow Route past Holly: Outside |
|  |  |  | 21:20-GMT | Position: $244^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow - Traveling |
|  | Sighting Number | 19 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  |  |  | Beaufort: 3 |  |
|  |  |  | 13:40-PST | Saw: Blow |
|  |  |  | 21:40-GMT | Position: 160 / 913 m Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 13:42-PST | Saw: Blow |
|  |  |  | 21:42-GMT | Position: $168^{\circ}$ / 778 m Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 13:45-PST | Saw: Blow |
|  |  |  | 21:45-GMT | Position: 205 / 629 m Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 13:50-PST | Saw: Blow Route past Holly: Inside |
|  |  |  | 21:50-GMT | Position: $252^{\circ}$ / 883 m Direction: West; Behavior: Speed slow - Traveling |
| Feb 20 | Day 11 of 107 |  | Gray whale (n | nd) Daily Totals Whales 6 Calves 0 |
|  | Sighting Number | 01 | Quality: Good Beaufort: 1 | Total 2 - 0 Calves at sighting |
|  |  |  | 08:57-PST | Saw: Blow |
|  |  |  | 16:57-GMT | Position: $161^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  |  | 09:02-PST | Saw: Blow |
|  |  |  | 17:02-GMT | Position: $173^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  |  | 09:12-PST | Saw: Blow |
|  |  |  | 17:12-GMT | Position: $194{ }^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |


|  | 09:20-PST | Saw: Body |
| :---: | :---: | :---: |
|  | 17:20-GMT | Position: $218^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 09:31-PST | Saw: Body Route past Holly: Outside |
|  | 17:31-GMT | Position: $238^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling $^{\text {/ }}$ |
| Sighting Number 05 | Quality: Good | Total 1 - 0 Calves at sighting |
|  | Beaufort: 1 |  |
|  | 09:35-PST | Saw: Blow |
|  | 17:35-GMT | Position: $108^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:40-PST | Saw: Blow |
|  | 17:40-GMT | Position: 111 / 2749 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | 09:47-PST | Saw: Blow |
|  | 17:47-GMT | Position: $119^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 10:06-PST | Saw: Blow |
|  | 18:06-GMT | Position: $179^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 10:14-PST | Saw: Blow Route past Holly: Inside |
|  | 18:14-GMT | Position: $222^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling $^{\text {a }}$ |
| Sighting Number 20 | Quality: Good | Total 2 - 0 Calves at sighting |
|  | Beaufort: 2 |  |
|  | 12:19-PST | Saw: Blow |
|  | 20:19-GMT | Position: $186^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:23-PST | Saw: Blow |
|  | 20:23-GMT | Position: $190^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow - Traveling |
|  | 12:25-PST | Saw: Blow |
|  | 20:25-GMT | Position: $193^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:27-PST | Saw: Blow |
|  | 20:27-GMT | Position: $195^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:30-PST | Saw: Blow |
|  | 20:30-GMT | Position: $200^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 12:34-PST | Saw: Blow |
|  | 20:34-GMT | Position: $207^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:36-PST | Saw: Blow |
|  | 20:36-GMT | Position: $209^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:43-PST | Saw: Blow |
|  | 20:43-GMT | Position: $220^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:46-PST | Saw: Blow |
|  | 20:46-GMT | Position: $224^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:49-PST | Saw: Blow |
|  | 20:49-GMT | Position: $227^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:54-PST | Saw: Blow |
|  | 20:54-GMT | Position: $232^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:56-PST | Saw: Blow Route past Holly: Outside |
|  | 20:56-GMT | Position: $235^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 25 <br> Images: 8571-81 | Quality: Good Beaufort: 2 | Total 1 - 0 Calves at sighting |
|  | 13:37-PST | Saw: Blow |
|  | 21:37-GMT | Position: $140^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:53-PST | Saw: Blow |
|  | 21:53-GMT | Position: $142^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:01-PST | Saw: Blow |
|  | 22:01-GMT | Position: $144^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:09-PST | Saw: Blow |
|  | 22:09-GMT | Position: $145^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


| Feb 23 | Day 14 of 107 | Gray whale (northbound) |  | Whales 1 | Calves 0 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sighting Number 03 | Quality: Poor <br> Beaufort: 0 | Total 1 - 0 Calves at sighting |  |  |
|  |  | 09:59-PST | Saw: Blow |  |  |
|  |  | 17:59-GMT | Position: $121^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |  |  |
|  |  | 10:08-PST | Saw: Blow |  |  |
|  |  | 18:08-GMT | Position: $153^{\circ} / 1020 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |  |  |
|  |  | 10:14-PST | Saw: Blow |  |  |
|  |  | 18:14-GMT | Position: $213^{\circ} / 661 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |  |  |
|  |  | 10:20-PST | Saw: Blow | Route past Holly: Inside |  |
|  |  | 18:20-GMT | Position: $249^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |  |  |
| Feb 24 | Day 15 of 107 | Gray whale (northbound) |  | Whales 6 | Calves 0 |
|  | Sighting Number 06 | Quality: Poor <br> Beaufort: 0 | Total 4-0 Calves at sighting |  |  |
|  |  | 13:00-PST | Saw: Blow |  |  |
|  |  | 21:00-GMT | Position: $157^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |  |  |
|  |  | 13:06-PST | Saw: Blow |  |  |
|  |  | 21:06-GMT | Position: $165^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling • Fluke |  |  |
|  |  | 13:11-PST | Saw: Blow |  |  |
|  |  | 21:11-GMT | Position: $174^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |  |  |
|  |  | 13:15-PST | Saw: Blow |  |  |
|  |  | 21:15-GMT | Position: $187^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling • Fluke |  |  |
|  |  | 13:17-PST | Saw: Blow |  |  |
|  |  | 21:17-GMT | Position: $193^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow • Traveling |  |  |
|  |  | 13:21-PST | Saw: Blow |  |  |
|  |  | 21:21-GMT | Position: 209 / 1483 m Direction: West; Behavior: Speed slow • Traveling • Fluke |  |  |
|  |  | 13:27-PST | Saw: Blow |  |  |
|  |  | 21:27-GMT | Position: $231^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow • Traveling |  |  |
|  |  | 13:32-PST | Saw: Blow | Route past Holly: Inside |  |
|  |  | 21:32-GMT | Position: $242^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |  |  |
|  | Sighting Number 13 | Quality: Poor Beaufort: 0 | Total 2 - 0 Calves at sighting |  |  |
|  |  | 14:45-PST | CueTip: Surface Disturb / Saw: Blow |  |  |
|  |  | 22:45-GMT | Position: $105^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |  |  |
|  |  | 14:50-PST | Saw: Blow |  |  |
|  |  | 22:50-GMT | Position: 110 / 3528 m Direction: West; Behavior: Speed slow - Traveling |  |  |
|  |  | 14:54-PST | Saw: Blow |  |  |
|  |  | 22:54-GMT | Position: 117 $/ 2749$ m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |  |  |
|  |  | 15:03-PST | Saw: Blow |  |  |
|  |  | 23:03-GMT | Position: $131^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |  |  |
|  |  | 15:09-PST | Saw: Blow |  |  |
|  |  | 23:09-GMT | Position: $144^{\circ} / 1674$ m Direction: West; Behavior: Speed slow • Traveling |  |  |
|  |  | 15:23-PST | Saw: Blow R | Route past Holly: Inside |  |
|  |  | 23:23-GMT | Position: 208 / 2260 m Direction: West; Behavior: Speed slow • Traveling |  |  |
| Feb 25 | Day 16 of 107 | Gray whale (northbound) |  | Whales 9 | Calves 0 |
|  | Sighting Number 05 | Quality: Poor <br> Beaufort: 2 | Total 1 - 0 Calves at sighting |  |  |
|  |  | 09:24-PST | Saw: Body Route past Holly: Inside |  |  |
|  |  | 17:24-GMT |  |  |  |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

| Sighting Number 07 | Quality: Poor <br> Beaufort: 2 | Total $2-0$ Calves at sighting |
| :---: | :---: | :---: |
|  | 09:30-PST | Saw: Blow |
|  | 17:30-GMT | Position: $170^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | 09:36-PST | Saw: Body |
|  | 17:36-GMT | Position: 184 / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 09:38-PST | Saw: Blow |
|  | 17:38-GMT | Position: 193 / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 09:43-PST | Saw: Body Route past Holly: Outside |
|  | 17:43-GMT | Position: 214 / 1674 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
| Sighting Number 08 | Quality: Poor Beaufort: 3 | Total 2 - 0 Calves at sighting |
| Images: 8668-81 | 09:46-PST | Saw: Blow |
|  | 17:46-GMT | Position: $106^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 09:51-PST | Saw: Blow |
|  | 17:51-GMT | Position: $106^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 09:54-PST | Saw: Blow |
|  | 17:54-GMT | Position: $106^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:57-PST | Saw: Blow |
|  | 17:57-GMT | Position: $106^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 10:03-PST | Saw: Blow |
|  | 18:03-GMT | Position: $109^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 10:10-PST | Saw: Blow |
|  | 18:10-GMT | Position: 113 / 2749 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | 10:15-PST | Saw: Blow |
|  | 18:15-GMT | Position: 117 $/ 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | 10:21-PST | Saw: Blow |
|  | 18:21-GMT | Position: $127^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 10:26-PST | Saw: Blow |
|  | 18:26-GMT | Position: 154 / 946 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 10:43-PST | Saw: Blow Route past Holly: Inside |
|  | 18:43-GMT | Position: $254^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:35-PST | Saw: Body |
|  | 18:35-GMT | Position: $217^{\circ} / 827 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
| Sighting Number 14 | Quality: Good Beaufort: 3 | Total 1 - 0 Calves at sighting |
|  | 11:45-PST | Saw: Body |
|  | 19:45-GMT | Position: $139^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 11:54-PST | Saw: Body |
|  | 19:54-GMT | Position: 193 / 778 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 11:59-PST | Saw: Body Route past Holly: Inside |
|  | 19:59-GMT | Position: $234{ }^{\circ}$ / 946 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
| Sighting Number 31 | Quality: Good <br> Beaufort: 2 | Total 3-0 Calves at sighting |
|  | 15:01-PST | Saw: Blow |
|  | 23:01-GMT | Position: $160^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 15:16-PST | Saw: Blow |
|  | 23:16-GMT | Position: $185^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 15:23-PST | Saw: Blow |
|  | 23:23-GMT | Position: 199 / 3088 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | 15:27-PST | Saw: Body |
|  | 23:27-GMT | Position: $209^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |

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|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | 10:48-PST | Saw: Blow |
|  |  | 18:48-GMT | Position: $211^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 10:53-PST | Saw: Blow |
|  |  | 18:53-GMT | Position: $218^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow P Traveling $^{\text {a }}$ |
|  |  | 10:57-PST | Saw: Blow Route past Holly: Outside |
|  |  | 18:57-GMT | Position: $225^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling • Fluke |
| Sighting Number | 04 | Quality: Poor | Total 3-0 Calves at sighting |
|  |  | Beaufort: 3 |  |
|  |  | 10:59-PST | Saw: Blow |
|  |  | 18:59-GMT | Position: $136^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow P Traveling $^{\text {a }}$ |
|  |  | 11:10-PST | Saw: Blow |
|  |  | 19:10-GMT | Position: $153^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 11:21-PST | Saw: Blow |
|  |  | 19:21-GMT | Position: $178^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 11:26-PST | Saw: Blow |
|  |  | 19:26-GMT | Position: $184^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 11:31-PST | Saw: Blow |
|  |  | 19:31-GMT | Position: $188^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 11:38-PST | Saw: Blow Route past Holly: nd |
|  |  | 19:38-GMT | Position: $194^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number | 07 | Quality: Poor | Total 3-0 Calves at sighting |
|  |  | Beaufort: 3 |  |
|  |  | 11:52-PST | Saw: Blow |
|  |  | 19:52-GMT | Position: $171^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |
|  |  | 11:54-PST | Saw: Blow |
|  |  | 19:54-GMT | Position: $176^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 11:57-PST | Saw: Blow |
|  |  | 19:57-GMT | Position: $178^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |
|  |  | 12:02-PST | Saw: Blow Route past Holly: Outside |
|  |  | 20:02-GMT | Position: $186^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number | 09 | Quality: Poor | Total 2 - 0 Calves at sighting |
|  |  | Beaufort: 3 |  |
|  |  | 11:57-PST | Saw: Blow |
|  |  | 19:57-GMT | Position: $169^{\circ} / 5027 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 12:10-PST | Saw: Blow |
|  |  | 20:10-GMT | Position: $184^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 12:27-PST | Saw: Blow |
|  |  | 20:27-GMT | Position: $201^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 12:36-PST | Saw: Blow Route past Holly: nd |
|  |  | 20:36-GMT | Position: $213^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number | 10 | Quality: Poor | Total 2 - 0 Calves at sighting |
|  |  | Beaufort: 3 |  |
|  |  | 12:03-PST | Saw: Blow |
|  |  | 20:03-GMT | Position: $169^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 12:08-PST | Saw: Blow |
|  |  | 20:08-GMT | Position: $179^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 12:15-PST | Saw: Blow |
|  |  | 20:15-GMT | Position: 197 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:21-PST | Saw: Blow |
|  |  | 20:21-GMT | Position: $212^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 12:26-PST | Saw: Blow Route past Holly: Outside |
|  |  | 20:26-GMT | Position: $224^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |



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| Sighting Number | 18 | Quality: Fair <br> Beaufort: 1 | Total 2 - 0 Calves at sighting |
| :---: | :---: | :---: | :---: |
|  |  | 12:07-PST | Saw: Body |
|  |  | 20:07-GMT | Position: $158^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling • Fluke |
|  |  | 12:12-PST | Saw: Blow |
|  |  | 20:12-GMT | Position: $164^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:18-PST | Saw: Blow |
|  |  | 20:18-GMT | Position: 178 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:26-PST | Saw: Blow |
|  |  | 20:26-GMT | Position: 199 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:29-PST | Saw: Blow Route past Holly: Outside |
|  |  | 20:29-GMT | Position: 212 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number | 19 | Quality: Fair | Total 2 - 0 Calves at sighting |
|  |  | Beaufort: 1 |  |
|  |  | 12:08-PST | Saw: Blow |
|  |  | 20:08-GMT | Position: 187 / 5027 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  |  | 12:14-PST | Saw: Blow |
|  |  | 20:14-GMT | Position: 195 / 5027 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  | 12:31-PST | Saw: Blow Route past Holly: Outside |
|  |  | 20:31-GMT | Position: 198 / 5027 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
| Sighting Number | 20 | Quality: Fair <br> Beaufort: 1 | Total 1 - 0 Calves at sighting |
|  |  | 12:32-PST | Saw: Blow |
|  |  | 20:32-GMT | Position: 164 / 5027 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:38-PST | Saw: Blow |
|  |  | 20:38-GMT | Position: $170^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:49-PST | Saw: Blow |
|  |  | 20:49-GMT | Position: 186\% 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:04-PST | Saw: Blow |
|  |  | 21:04-GMT | Position: 190 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:14-PST | Saw: Blow Route past Holly: Outside |
|  |  | 21:14-GMT | Position: $227^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number | 24 | Quality: Fair Beaufort: 4 | Total 1 - 0 Calves at sighting |
|  |  | 13:53-PST | Saw: Body |
|  |  | 21:53-GMT | Position: 174 / 412 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 13:54-PST | Saw: Body |
|  |  | 21:54-GMT | Position: 184 / 489 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 13:57-PST | Saw: Blow |
|  |  | 21:57-GMT | Position: 192 / 426 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 13:58-PST | Saw: Body |
|  |  | 21:58-GMT | Position: $202^{\circ}$ / 455 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 13:59-PST | Saw: Blow |
|  |  | 21:59-GMT | Position: $210^{\circ}$ / 489 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number | 29 | Quality: Fair Beaufort: 3 | Total 1 - 0 Calves at sighting |
|  |  | 14:45-PST | CueTip: Boat / Saw: Blow Route past Holly: Inside |
|  |  | 22:45-GMT | Position: 213 / 661 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number | 32 | Quality: Fair <br> Beaufort: 3 | Total 2 - 0 Calves at sighting |
|  |  | 15:10-PST | Saw: Blow |
|  |  | 23:10-GMT | Position: $168^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 15:16-PST | Saw: Blow |
|  |  | 23:16-GMT | Position: 180 / 3088 m Direction: West; Behavior: Speed slow • Traveling |

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| Sighting Number | 23 | Quality: Poor <br> Beaufort: 0 | Total 1 - 0 Calves at sighting Disappeared |
| :---: | :---: | :---: | :---: |
|  |  | 12:21-PST | Saw: Blow Route past Holly: Inside |
|  |  | 20:21-GMT | Position: $244^{\circ}$ / 778 m Direction: West; Behavior: Speed slow $\bullet$ Fluke |
| Sighting Number | 24 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  |  | Beaufort: 0 |  |
|  |  | 12:30-PST | Saw: Blow |
|  |  | 20:30-GMT | Position: $176^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:37-PST | Saw: Blow |
|  |  | 20:37-GMT | Position: $184^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  |  | 12:49-PST | Saw: Body Route past Holly: Inside |
|  |  | 20:49-GMT | Position: $194^{\circ} / 1020$ m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 30 |  | Quality: Fair | Total 3-0 Calves at sighting |
|  |  | Beaufort: 3 |  |
|  |  | 13:53-PST | Saw: Blow |
|  |  | 21:53-GMT | Position: 144 / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 14:04-PST | Saw: Blow |
|  |  | 22:04-GMT | Position: $151^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 14:13-PST | Saw: Blow |
|  |  | 22:13-GMT | Position: $158^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Breach |
|  |  | 14:24-PST | Saw: Blow |
|  |  | 22:24-GMT | Position: $166^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 14:31-PST | Saw: Blow |
|  |  | 22:31-GMT | Position: $171^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 14:36-PST | Saw: Blow |
|  |  | 22:36-GMT | Position: 178 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 14:44-PST | Saw: Blow |
|  |  | 22:44-GMT | Position: 187 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 14:55-PST | Saw: Blow |
|  |  | 22:55-GMT | Position: $200^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:03-PST | Saw: Blow |
|  |  | 23:03-GMT | Position: $210^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:15-PST | Saw: Blow |
|  |  | 23:15-GMT | Position: $226^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:22-PST | Saw: Blow Route past Holly: Outside |
|  |  | 23:22-GMT | Position: $233{ }^{\circ} / 3528$ m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number | 33 | Quality: Fair | Total $2-0$ Calves at sighting |
|  |  | Beaufort: 2 |  |
|  |  | 15:08-PST | Saw: Blow |
|  |  | 23:08-GMT | Position: 152 / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  | 15:13-PST | Saw: Blow |
|  |  | 23:13-GMT | Position: 157 / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:19-PST | Saw: Blow |
|  |  | 23:19-GMT | Position: $165^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:22-PST | Saw: Blow |
|  |  | 23:22-GMT | Position: $169^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 15:29-PST | Saw: Blow |
|  |  | 23:29-GMT | Position: $178^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  |  | 15:45-PST | Saw: Blow |
|  |  | 23:45-GMT | Position: $207^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:49-PST | Saw: Blow |
|  |  | 23:49-GMT | Position: $212^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  | $\begin{aligned} & \text { 15:55-PST } \\ & \text { 23:55-GMT } \end{aligned}$ | Saw: Blow <br> Position: $224^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  | 16:01-PST | Saw: Blow Route past Holly: Outside |
|  |  | 0:01; 3/6/2014-GMT | Position: $231^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow P Traveling $^{\text {a }}$ |
| Mar 07 | Day 26 of 107 | Gray whale (northbound) |  |
|  | Sighting Number 03 | Quality: Fair <br> Beaufort: 0 | Total 4-0 Calves at sighting |
|  |  | 10:04-PST | Saw: Blow <br> Position: $138^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:04-GMT |  |
|  |  | 10:12-PST | Saw: Blow <br> Position: $149^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:12-GMT |  |
|  |  | 10:19-PST | Saw: Blow <br> Position: $163^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:19-GMT |  |
|  |  | 10:26-PST | Saw: Blow <br> Position: $181^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:26-GMT |  |
|  |  | 10:31-PST | Saw: Blow <br> Position: $196^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:31-GMT |  |
|  |  | 10:36-PST | Saw: Blow <br> Position: $209^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:36-GMT |  |
|  |  | 10:42-PST | Saw: Blow <br> Position: 220/m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:42-GMT |  |
|  |  | 10:47-PST |  |
|  |  | 18:47-GMT |  |
|  | Sighting Number 04 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  |  | Beaufort: 0 |  |
|  |  | 10:29-PST | Saw: Blow <br> Position: $131^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:29-GMT |  |
|  |  | 10:40-PST | Saw: Blow <br> Position: 144 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:40-GMT |  |
|  |  | 10:47-PST | Saw: Body |
|  |  | 18:47-GMT | Position: $156^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 10:49-PST | Saw: Body <br> Position: $163^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:49-GMT |  |
|  |  | 10:57-PST | Saw: Blow Route past Holly: nd |
|  |  | 18:57-GMT | Position: $174^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | Sighting Number 06 | Quality: Fair | Total 3-0 Calves at sighting |
|  |  | Beaufort: 0 |  |
|  |  | 10:46-PST | Saw: Blow <br> Position: $146^{\circ} / 3528$ m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:46-GMT |  |
|  |  | 10:50-PST | Saw: Blow <br> Position: $157^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:50-GMT |  |
|  |  | 10:57-PST | Saw: Blow <br> Position: $176^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:57-GMT |  |
|  |  | 11:02-PST | Saw: Blow <br> Position: $188^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 19:02-GMT |  |
|  |  | 11:13-PST | Saw: Blow <br> Position: $215^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 19:13-GMT |  |
|  |  | 11:30-PST | Saw: Blow Route past Holly: nd <br> Position: $230^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke  |
|  |  | 19:30-GMT |  |
|  | Sighting Number 08 | Quality: Fair <br> Beaufort: 0 | Total 4 - 0 Calves at sighting |
|  |  | 10:54-PST | Saw: BlowPosition: 173 / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 18:54-GMT |  |

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2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  | Sighting Number 23 | Quality: Fair <br> Beaufort: 0 | Total 3-0 Calves at sighting |
| :---: | :---: | :---: | :---: |
|  |  | 14:50 -PST | Saw: Blow |
|  |  | 22:50-GMT | Position: $150^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 14:58-PST | Saw: Blow |
|  |  | 22:58-GMT | Position: $157^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:11-PST | Saw: Blow |
|  |  | 23:11-GMT | Position: $174^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:17-PST | Saw: Blow |
|  |  | 23:17-GMT | Position: $182^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:35-PST | Saw: Blow |
|  |  | 23:35-GMT | Position: $213^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 15:42-PST | Saw: Blow Route past Holly: Outside |
|  |  | 23:42-GMT | Position: $225^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow P Traveling $^{\text {a }}$ |
|  | Sighting Number 29 | Quality: Poor | Total 1 - 0 Calves at sighting |
|  |  | Beaufort: 4 |  |
|  |  | 16:52-PST | Saw: Blow |
|  |  | 0:52; 3/8/2014-GMT | Position: $112^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:59-PST | Saw: Blow Route past Holly: nd |
|  |  | 0:59; 3/8/2014-GMT | Position: 130 / 1483 m Direction: West; Behavior: Speed slow |
| Mar 08 | Day 27 of 107 | Gray whale (northb | nd) Daily Totals Whales 15 Calves 0 |
|  | Sighting Number 03 | Quality: Fair <br> Beaufort: 0 | Total 1 - 0 Calves at sighting Disappeared |
|  |  | 09:10-PST | Saw: Body Route past Holly: nd |
|  |  | 17:10-GMT | Position: 188 / 696 m Direction: West; Behavior: Speed slow • Traveling |
|  | Sighting Number 12 | Quality: Good | Total 2 - 0 Calves at sighting |
|  |  | Beaufort: 1 |  |
|  |  | 10:32-PST | Saw: Blow |
|  |  | 18:32-GMT | Position: $123^{\circ}$ / 5027 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 10:41-PST | Saw: Blow |
|  |  | 18:41-GMT | Position: $125^{\circ} / 5027 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 10:48-PST | Saw: Blow |
|  |  | 18:48-GMT | Position: $126^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 10:55-PST | Saw: Blow |
|  |  | 18:55-GMT | Position: $131^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |
|  |  | 11:06-PST | Saw: Blow |
|  |  | 19:06-GMT | Position: 138 / 3528 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  |  | 11:19-PST | Saw: Blow |
|  |  | 19:19-GMT | Position: 149 / 3088 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  |  | 11:29-PST | Saw: Blow |
|  |  | 19:29-GMT | Position: $164^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  |  | 11:33-PST | Saw: Blow |
|  |  | 19:33-GMT | Position: 172 / 2749 m Direction: West; Behavior: Speed slow • Fluke • Breach • |
|  |  | Breached near oil |  |
|  |  | 11:36-PST | Saw: Blow |
|  |  | 19:36-GMT | Position: 178 / 2749 m Direction: West; Behavior: Speed slow • Breach • Spyhop • |
|  |  | 11:40-PST | Saw: Blow |
|  |  | 19:40-GMT | Position: $186^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling • Rolling |
|  |  | 11:51-PST | Saw: Blow Route past Holly: Inside |
|  |  | 19:51-GMT | Position: 205 / 2260 m Direction: West; Behavior: Speed slow • Traveling |



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2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 13:19-PDT | Saw: Blow |
|  |  | 20:19-GMT | Position: $179^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:23-PDT | Saw: Blow |
|  |  | 20:23-GMT | Position: $225^{\circ}$ / 1208 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:25-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 20:25-GMT | Position: $236^{\circ}$ / 1208 m Direction: West; Behavior: Speed slow - Traveling |
|  | Sighting Number |  | 22 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  |  |  |  | Beaufort: 4 |  |
|  |  |  |  | 13:28-PDT | Saw: Blow |
|  |  |  |  | 20:28-GMT | Position: $135^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  |  | 13:36-PDT | Saw: Blow |
|  |  |  |  | 20:36-GMT | Position: $139^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:47-PDT |  | Saw: Blow |
|  |  | 20:47-GMT |  | Position: 154 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:55-PDT |  | Saw: Blow |
|  |  | 20:55-GMT |  | Position: $169^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 14:03-PDT |  | Saw: Blow |
|  |  | 21:03-GMT |  | Position: $195^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 14:13-PDT |  | Saw: Blow |
|  |  | 21:13-GMT |  | Position: $227^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 14:22-PDT |  | Saw: Blow Route past Holly: Inside |
|  |  | 21:22-GMT |  | Position: $245^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | Sighting Number | 29 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  |  |  | Beaufort: 3 |  |
|  |  |  | 15:42-PDT | Saw: Blow |
|  |  |  | 22:42-GMT | Position: $155^{\circ}$ / 1020 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 15:47-PDT | Saw: Blow Route past Holly: Inside |
|  |  |  | 22:47-GMT | Position: 193 / 946 m Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | Sighting Number | 31 | Quality: Fair | Total 2 - 0 Calves at sighting |
|  |  |  | Beaufort: 2 |  |
|  |  |  | 16:37-PDT | Saw: Blow |
|  |  |  | 23:37-GMT | Position: $138^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  |  | 16:46-PDT | Saw: Blow |
|  |  |  | 23:46-GMT | Position: 142 / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  |  | 16:57-PDT |  |
|  |  |  | 23:57-GMT | Position: 150 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
| Mar 13 | Day 32 of 107 |  | Gray whale | nd) Daily Totals Whales 12 Calves 0 |
|  | Sighting Number | 05 | Quality: Fair | Total 2 - 0 Calves at sighting |
|  |  |  | Beaufort: 1 |  |
|  |  |  | 09:27-PDT | Saw: Blow |
|  |  |  | 16:27-GMT | Position: 188 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 09:32-PDT | Saw: Blow |
|  |  |  | 16:32-GMT | Position: $205^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 09:37-PDT | Saw: Blow Route past Holly: Inside |
|  |  |  | 16:37-GMT | Position: $222^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | Sighting Number | 07 | Quality: Fair Beaufort: 0 | Total 2 - 0 Calves at sighting |
|  |  |  | 10:19-PDT | Saw: Blow |
|  |  |  | 17:19-GMT | Position: $166^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  |  |  | 10:27-PDT | Saw: Body |
|  |  |  | 17:27-GMT | Position: 193 / 1922 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  |  |  | 10:34-PDT | Saw: Blow Route past Holly: Inside |
|  |  |  | 17:34-GMT | Position: $222^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

| Sighting Number 08 | Quality: Fair Beaufort: 0 | Total 3-0 Calves at sighting |
| :---: | :---: | :---: |
|  | 10:25-PDT | Saw: Body |
|  | 17:25-GMT | Position: $169^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:29-PDT | Saw: Blow |
|  | 17:29-GMT | Position: $176^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:42-PDT | Saw: Blow |
|  | 17:42-GMT | Position: $200^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:49-PDT | Saw: Blow Route past Holly: nd |
|  | 17:49-GMT | Position: $215^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 13 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  | Beaufort: 0 |  |
|  | 10:56-PDT | Saw: Blow |
|  | 17:56-GMT | Position: $124^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 11:04-PDT | Saw: Blow |
|  | 18:04-GMT | Position: 145 / 1331 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 11:15-PDT | Saw: Body Route past Holly: Inside |
|  | 18:15-GMT | Position: $224^{\circ}$ / 946 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 19 | Quality: Fair <br> Beaufort: 3 | Total 1 - 0 Calves at sighting |
| Images: 9092-9107 | 12:05-PDT | Saw: Blow |
|  | 19:05-GMT | Position: 110 / 2260 m Direction: Still; Behavior: Foraging |
|  | 12:19-PDT | Saw: Blow |
|  | 19:19-GMT | Position: 110 / 2260 m Direction: Still; Behavior: Foraging |
|  | 12:21-PDT | Saw: Blow |
|  | 19:21-GMT | Position: $110^{\circ} / 2260 \mathrm{~m}$ Direction: Still; Behavior: Foraging |
|  | 12:24-PDT | Saw: Blow |
|  | 19:24-GMT | Position: 110 / 2260 m Direction: Still; Behavior: Foraging |
|  | 12:43-PDT | Saw: Blow |
|  | 19:43-GMT | Position: $114^{\circ} / 1208 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Maybe trying to feed |  |
|  | 12:52-PDT | Saw: Blow |
|  | 19:52-GMT | Position: $135^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:58-PDT | Saw: Body |
|  | 19:58-GMT | Position: $159^{\circ} / 528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:06-PDT | Saw: Blow |
|  | 20:06-GMT | Position: $173^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:15-PDT | Saw: Body Route past Holly: Inside |
|  | 20:15-GMT | Position: $209^{\circ} / 696$ m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 21 | Quality: Poor <br> Beaufort: 2 | Total 1 - 0 Calves at sighting |
|  | 13:25-PDT | Saw: Blow |
|  | 20:25-GMT | Position: $109^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:36-PDT | Saw: Blow |
|  | 20:36-GMT | Position: $122^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:41-PDT | Saw: Blow |
|  | 20:41-GMT | Position: 134 / 1403 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:46-PDT | Saw: Blow |
|  | 20:46-GMT | Position: $151^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:59-PDT | Saw: Blow Route past Holly: Inside |
|  | 20:59-GMT | Position: $238^{\circ} / 946 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |


|  | Sighting Number | 23 | Quality: Poor Beaufort: 2 | Total 1 - 0 Calves at sighting |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \hline \text { 14:17-PDT } \\ & \text { 21:17-GMT } \\ & \text { Juvenile } \mathrm{w} / \mathrm{v} \end{aligned}$ | Saw: Blow <br> Position: $113^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow • Traveling k on back |
|  |  |  | $\begin{aligned} & \hline \text { 14:27-PDT } \\ & \text { 21:27-GMT } \\ & \text { Disappearec } \end{aligned}$ | Saw: Blow Route past Holly: Inside <br> Position: $148^{\circ} / 827 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling  |
|  | Sighting Number | 25 | Quality: Poor Beaufort: 2 | Total 1 - 0 Calves at sighting |
|  |  |  | 14:53-PDT | Saw: Blow |
|  |  |  | 21:53-GMT | Position: $114^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 14:57-PDT | Saw: Blow |
|  |  |  | 21:57-GMT | Position: 119 / 2260 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  |  |  | 15:11-PDT | Saw: Body Route past Holly: nd |
|  |  |  | 22:11-GMT | Position: $159^{\circ} / 778$ m Direction: West; Behavior: Speed slow - Traveling |
| Mar 14 | Day 33 of 107 |  | Gray whale (northbound) |  |
|  | Sighting Number | 02 | Quality: Poor <br> Beaufort: 1 | Total 2 - 0 Calves at sighting |
|  |  |  | 09:05-PDT | Saw: Blow |
|  |  |  | 16:05-GMT | Position: $126^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  |  | 09:10-PDT | Saw: Blow |
|  |  |  | 16:10-GMT | Position: $130^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 09:15-PDT | Saw: Blow |
|  |  |  | 16:15-GMT | Position: $135^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  |  |  | 09:22-PDT | Saw: Blow |
|  |  |  | 16:22-GMT | Position: 146 / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  |  | 09:32-PDT | Saw: Blow Route past Holly: nd |
|  |  |  | 16:32-GMT | Position: $168^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | Sighting Number | 06 | Quality: Poor Beaufort: 1 | Total 2-0 Calves at sighting |
|  |  |  | 09:35-PDT | Saw: Blow |
|  |  |  | 16:35-GMT | Position: $129^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 09:37-PDT | Saw: Blow |
|  |  |  | 16:37-GMT | Position: $133^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  |  |  | 09:56-PDT |  |
|  |  |  | 16:56-GMT | Position: $187^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | Sighting Number | 07 | Quality: Poor Beaufort: 1 | Total 2 - 0 Calves at sighting |
|  |  |  | 09:42-PDT |  |
|  |  |  | 16:42-GMT | Position: $149^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 09:50-PDT | Saw: Blow |
|  |  |  | 16:50-GMT | Position: $176^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  |  | 09:55-PDT | Saw: Blow Route past Holly: nd |
|  |  |  | 16:55-GMT | Position: $199^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | Sighting Number | 14 | Quality: Poor Beaufort: 2 | Total 2 - 0 Calves at sighting |
|  |  |  | 11:00-PDT | Saw: Blow |
|  |  |  | 18:00-GMT | Position: $169^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  |  |  | 11:11-PDT | Saw: Blow |
|  |  |  | 18:11-GMT | Position: 198 / 3088 m Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 11:31-PDT | Saw: Blow Route past Holly: Outside |
|  |  |  | 18:31-GMT | Position: $236^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

| Sighting Number | 16 | Quality: Poor Beaufort: 2 | Total 2 - 0 Calves at sighting |
| :---: | :---: | :---: | :---: |
|  |  | 11:08-PDT | Saw: Blow |
|  |  | 18:08-GMT | Position: $174^{\circ}$ / 1403 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 11:21-PDT | Saw: Blow |
|  |  | 18:21-GMT | Position: $236^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number | 20 | Quality: Poor | Total 1 - 0 Calves at sighting |
|  |  | Beaufort: 1 |  |
|  |  | 11:45-PDT | Saw: Blow |
|  |  | 18:45-GMT | Position: $169^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 11:48-PDT | Saw: Blow |
|  |  | 18:48-GMT | Position: 177% 2260 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  |  | 11:54-PDT | Saw: Blow |
|  |  | 18:54-GMT | Position: 193 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:01-PDT | Saw: Blow |
|  |  | 19:01-GMT | Position: $224^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:11-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 19:11-GMT | Position: $239^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number | 21 | Quality: Poor <br> Beaufort: 1 | Total 2 - 0 Calves at sighting |
|  |  | 11:53-PDT | Saw: Blow |
|  |  | 18:53-GMT | Position: $178^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:07-PDT | Saw: Blow |
|  |  | 19:07-GMT | Position: $206^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:15-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 19:15-GMT | Position: $226^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number | 23 | Quality: Poor Beaufort: 2 | Total 3-0 Calves at sighting |
|  |  | 12:35-PDT |  |
|  |  | 19:35-GMT | Position: $159^{\circ} / 600$ m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:43-PDT | Saw: Blow |
|  |  | 19:43-GMT | Position: $167^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:49-PDT | Saw: Blow |
|  |  | 19:49-GMT | Position: $171^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling • Fluke • |
|  |  | 12:57-PDT | Saw: Blow |
|  |  | 19:57-GMT | Position: $186^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 13:10-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 20:10-GMT | Position: $218^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow P Traveling $^{\text {a }}$ |
| Sighting Number | 25 | Quality: Poor Beaufort: 2 | Total 3-0 Calves at sighting |
|  |  | 12:56-PDT | Saw: Blow |
|  |  | 19:56-GMT | Position: $123^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:02-PDT | Saw: Blow |
|  |  | 20:02-GMT | Position: $133^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:16-PDT | Saw: Blow |
|  |  | 20:16-GMT | Position: $166^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 13:34-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 20:34-GMT | Position: $232^{\circ} / 1483$ m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number | 31 | Quality: Fair <br> Beaufort: 2 | Total 1 - 0 Calves at sighting |
|  |  | 14:15-PDT | Saw: Blow |
|  |  | 21:15-GMT | Position: 114 / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 14:19-PDT | Saw: Blow |
|  |  | 21:19-GMT | Position: $122^{\circ} / 1403 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  | 09:41-PDT | Saw: Blow |
| :---: | :---: | :---: | :---: |
|  |  | 16:41-GMT | Position: $190^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 09:46-PDT | Saw: |
|  |  | 16:46-GMT | Position: $237^{\circ}$ / 883 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 10:05-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 17:05-GMT | Position: 276 / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Breach |
|  |  | breached twice |  |
| Sighting Number | 12 | Quality: Fair | Total 2 - 0 Calves at sighting |
|  |  | Beaufort: 1 |  |
|  |  | 10:51-PDT | Saw: Blow |
|  |  | 17:51-GMT | Position: $164^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 11:01-PDT | Saw: Blow |
|  |  | 18:01-GMT | Position: 174/ 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 11:11-PDT | Saw: Blow |
|  |  | 18:11-GMT | Position: $204^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | :-PDT | Saw: |
|  |  | 7:-GMT | Position: / m Direction: West; Behavior: Speed slow |
|  |  | 11:21-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 18:21-GMT | Position: $221^{\circ} / 913 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number | 13 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  |  | Beaufort: 1 |  |
|  |  | 10:53-PDT | Saw: Blow |
|  |  | 17:53-GMT | Position: 148 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 10:56-PDT | Saw: Blow Route past Holly: nd |
|  |  | 17:56-GMT | Position: 159 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number | 14 | Quality: Fair | Total 3-0 Calves at sighting |
|  |  | Beaufort: 1 |  |
|  |  | 11:06-PDT | Saw: Blow |
|  |  | 18:06-GMT | Position: $126^{\circ} / 3528$ m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  | 11:13-PDT | Saw: Blow |
|  |  | 18:13-GMT | Position: $130^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 11:18-PDT | Saw: Blow |
|  |  | 18:18-GMT | Position: $137^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 11:30-PDT | Saw: Blow |
|  |  | 18:30-GMT | Position: 167 / 2749 m Direction: West; Behavior: Speed slow Traveling • Fluke $^{\text {a }}$ |
|  |  | 11:38-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 18:38-GMT | Position: $191^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
| Sighting Number | 17 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  |  | Beaufort: 1 |  |
|  |  | 11:45-PDT | Saw: Blow |
|  |  | 18:45-GMT | Position: $134^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  | 11:52-PDT | Saw: Blow |
|  |  | 18:52-GMT | Position: $195^{\circ} / 574 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 11:55-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 18:55-GMT | Position: $229^{\circ} / 661 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number | 22 | Quality: Fair | Total 2 - 0 Calves at sighting |
|  |  | Beaufort: 1 |  |
|  |  | 12:48-PDT | Saw: Blow |
|  |  | 19:48-GMT | Position: 108 / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 12:52-PDT | Saw: Blow |
|  |  | 19:52-GMT | Position: 110 / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:57-PDT | Saw: Blow |
|  |  | 19:57-GMT | Position: 115 / 3528 m Direction: West; Behavior: Speed slow • Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

| Sighting Number | 32 | Quality: Fair Beaufort: 3 | Total 1 - 0 Calves at sighting |
| :---: | :---: | :---: | :---: |
|  |  | 14:04-PDT | Saw: Blow |
|  |  | 21:04-GMT | Position: $159^{\circ}$ / 489 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 14:08-PDT | Saw: Blow |
|  |  | 21:08-GMT | Position: 183 / 426 m Direction: West; Behavior: Speed slow ${ }^{\text {e }}$ Traveling |
|  |  | 14:18-PDT | Saw: Blow |
|  |  | 21:18-GMT | Position: $223^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | Possibly fee | g towards shore |
|  |  | 14:23-PDT | Saw: Blow |
|  |  | 21:23-GMT | Position: $221^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | Possibly feed | g towards Santa Cruz |
|  |  | 14:28-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 21:28-GMT | Position: $231^{\circ} / 827 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling • Fluke |
| Sighting Number | 40 | Quality: Fair | Total 3-0 Calves at sighting |
|  |  | Beaufort: 3 |  |
|  |  | 14:42-PDT | Saw: Body |
|  |  | 21:42-GMT | Position: $150^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 14:47-PDT | Saw: Blow |
|  |  | 21:47-GMT | Position: $179^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 14:52-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 21:52-GMT | Position: $20 \mathbf{7}^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number | 41 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  |  | Beaufort: 3 |  |
|  |  | 14:54-PDT | Saw: Blow |
|  |  | 21:54-GMT | Position: $138^{\circ} / \mathrm{m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 14:56-PDT | Saw: Blow |
|  |  | 21:56-GMT | Position: $145^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 15:01 -PDT | Saw: Blow |
|  |  | 22:01-GMT | Position: 168 / 1331 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  |  | 15:06-PDT | Saw: Blow |
|  |  | 22:06-GMT | Position: 198 / 1331 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  | 15:15-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 22:15-GMT | Position: $235^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number | 45 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  |  | Beaufort: 3 |  |
|  |  | 16:14-PDT | Saw: Blow |
|  |  | 23:14-GMT | Position: $100^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:17-PDT | Saw: Blow |
|  |  | 23:17-GMT | Position: $104^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:19-PDT | Saw: Blow |
|  |  | 23:19-GMT | Position: $106^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:23-PDT | Saw: Blow |
|  |  | 23:23-GMT | Position: $109^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 16:26-PDT | Saw: Blow |
|  |  | 23:26-GMT | Position: 112 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 16:29-PDT | Saw: Blow |
|  |  | 23:29-GMT | Position: $115^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:34-PDT | Saw: Blow |
|  |  | 23:34-GMT | Position: $124^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:39-PDT | Saw: Blow |
|  |  | 23:39-GMT | Position: $144^{\circ}$ / 913 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |


|  |  |  | 16:44-PDT | Saw: Blow Route past Holly: Inside |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 23:44-GMT | Position: $189^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Sighting Number | 48 | Quality: Fair | Total 3-0 Calves at sighting |
|  |  |  | Beaufort: 3 |  |
|  |  |  | 16:59-PDT | Saw: Blow |
|  |  |  | 23:59-GMT | Position: 194 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 17:03-PDT | Saw: Blow |
|  |  |  | 0:03; 3/16/2014-GMT | Position: $200^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 17:06-PDT | Saw: Blow |
|  |  |  | 0:06; 3/16/2014-GMT | Position: $204^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 17:08-PDT | Saw: Blow Route past Holly: nd |
|  |  |  | 0:08; 3/16/2014-GMT | Position: $208^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
| Mar 16 | Day 35 of 107 |  | Gray whale (northb | und) Daily Totals Whales 27 Calves 0 |
|  | Sighting Number | 08 | Quality: Fair | Total 4 - 0 Calves at sighting |
|  |  |  | Beaufort: 0 |  |
|  |  |  | 09:51-PDT | CueTip: Boat / Saw: Blow |
|  |  |  | 16:51-GMT | Position: $116^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | Condor approached | nd we saw blows |
|  |  |  | 10:09-PDT | Saw: Blow |
|  |  |  | 17:09-GMT | Position: $123^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 10:17-PDT | Saw: Blow |
|  |  |  | 17:17-GMT | Position: $128^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling • Fluke |
|  |  |  | 10:25-PDT | Saw: Blow |
|  |  |  | 17:25-GMT | Position: $135^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Rolling |
|  |  |  | 10:34-PDT | Saw: Blow |
|  |  |  | 17:34-GMT | Position: $143^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  |  | 10:40-PDT | Saw: Blow |
|  |  |  | 17:40-GMT | Position: 158 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 10:45-PDT | Saw: Blow Route past Holly: Inside |
|  |  |  | 17:45-GMT | Position: $179^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | Sighting Number | 13 | Quality: Fair | Total 3-0 Calves at sighting |
|  |  |  | Beaufort: 0 |  |
|  |  |  | 10:42-PDT | Saw: Blow |
|  |  |  | 17:42-GMT | Position: 124 / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 10:48-PDT | Saw: Blow |
|  |  |  | 17:48-GMT | Position: 129 / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 10:54-PDT | Saw: Blow |
|  |  |  | 17:54-GMT | Position: $136^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 11:00-PDT | Saw: Blow |
|  |  |  | 18:00-GMT | Position: 137 / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 11:23-PDT | Saw: Blow |
|  |  |  | 18:23-GMT | Position: 155 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 11:29-PDT | Saw: Blow Route past Holly: nd |
|  |  |  | 18:29-GMT | Position: $164^{\circ} / 3088$ m Direction: West; Behavior: Speed slow • Traveling |
|  | Sighting Number | 14 | Quality: Fair <br> Beaufort: 0 | Total $2-0$ Calves at sighting |
|  |  |  | 10:52-PDT | Saw: Blow |
|  |  |  | 17:52-GMT | Position: $127^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |
|  |  |  | 11:10-PDT | Saw: Blow |
|  |  |  | 18:10-GMT | Position: $137^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling • Sharking |
|  |  |  | 11:17-PDT | Saw: Blow |
|  |  |  | 18:17-GMT | Position: 144 / 2749 m Direction: West; Behavior: Speed slow • Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  |  |
| :---: | :---: | :---: |
|  | 11:21-PDT | Saw: Blow |
|  | 18:21-GMT | Position: 151 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:26-PDT | Saw: Blow |
|  | 18:26-GMT | Position: $164^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:34-PDT | Saw: Blow Route past Holly: Inside |
|  | 18:34-GMT | Position: $187^{\circ} / 1674$ m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 19 | Quality: Fair <br> Beaufort: 1 | Total 2 - 0 Calves at sighting |
|  | 11:40-PDT | Saw: Blow |
|  | 18:40-GMT | Position: $145^{\circ}$ / 5027 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:45-PDT | Saw: Blow |
|  | 18:45-GMT | Position: 147 / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:25-PDT | Saw: Blow |
|  | 19:25-GMT | Position: $157^{\circ} / 3528$ m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:28-PDT | Saw: Blow |
|  | 19:28-GMT | Position: $158^{\circ} / 3528$ m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:35-PDT | Saw: Blow |
|  | 19:35-GMT | Position: $179^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:40-PDT | Saw: Blow |
|  | 19:40-GMT | Position: $183^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:48-PDT | Saw: Blow Route past Holly: Outside |
|  | 19:48-GMT | Position: $193^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 27 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  | Beaufort: 1 |  |
|  | 12:34-PDT | Saw: Blow |
|  | 19:34-GMT | Position: $178^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:40-PDT | Saw: Blow |
|  | 19:40-GMT | Position: 208 / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:45-PDT | Saw: Blow Route past Holly: Inside |
|  | 19:45-GMT | Position: $235^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 30 <br> Images: 9201-11 | Quality: Fair <br> Beaufort: 1 | Total 1 - 0 Calves at sighting |
|  | 12:55-PDT | Saw: Blow |
|  | 19:55-GMT | Position: $110^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:11-PDT | Saw: Blow |
|  | 20:11-GMT | Position: $126^{\circ}$ / 280 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:15-PDT | Saw: Blow Route past Holly: Inside |
|  | 20:15-GMT | Position: 176 / 212 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 37 <br> Images: 9223-49 | Quality: Fair <br> Beaufort: 1 | Total 3-0 Calves at sighting |
|  | 14:03-PDT | Saw: Blow |
|  | 21:03-GMT | Position: $107^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:08-PDT | Saw: Blow |
|  | 21:08-GMT | Position: $109^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow P Traveling $^{\text {a }}$ |
|  | 14:12-PDT | Saw: Blow |
|  | 21:12-GMT | Position: $113^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 14:15-PDT | Saw: Body |
|  | 21:15-GMT | Position: $116^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | 14:18-PDT | Saw: Blow |
|  | 21:18-GMT | Position: 118 / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |
|  | 14:24-PDT | Saw: Body |
|  | 21:24-GMT | Position: $129^{\circ}$ / 778 m Direction: West; Behavior: Speed slow - Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

Mar 17 Day 36 of $107 \quad$ Gray whale (northbound) $\quad$ Daily Totals Whales 11 Calves 0

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  | Sighting Number 01 | Quality: Fair Beaufort: 4 | Total 3-0 Calves at sighting |
| :---: | :---: | :---: | :---: |
|  |  | 09:01-PDT | Saw: Blow |
|  |  | 16:01-GMT | Position: $132^{\circ} / 5027 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 09:20-PDT | Saw: Blow |
|  |  | 16:20-GMT | Position: $140^{\circ} / 5027 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 09:28-PDT | Saw: Blow |
|  |  | 16:28-GMT | Position: $145^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 09:39-PDT | Saw: Blow |
|  |  | 16:39-GMT | Position: $153^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 09:48-PDT | Saw: Blow |
|  |  | 16:48-GMT | Position: $162^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 10:03-PDT | Saw: Blow |
|  |  | 17:03-GMT | Position: $187^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 10:20-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 17:20-GMT | Position: $239^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |
|  | Sighting Number 03 | Quality: Fair | Total 6-0 Calves at sighting |
|  |  | Beaufort: 4 |  |
|  |  | 09:07-PDT | Saw: Blow |
|  |  | 16:07-GMT | Position: $189^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 09:10-PDT | Saw: Blow |
|  |  | 16:10-GMT | Position: $192^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Spyhop • Rolling • |
|  |  | 09:22-PDT | Saw: Blow |
|  |  | 16:22-GMT | Position: $200^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 09:35-PDT | Saw: Blow Route past Holly: Outside |
|  |  | 16:35-GMT | Position: $211^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | Sighting Number 04 | Quality: Fair | Total 2 - 0 Calves at sighting |
|  |  | Beaufort: 4 |  |
|  |  | 09:25-PDT | Saw: Blow Route past Holly: Outside |
|  |  | 16:25-GMT | Position: 194 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | Joined Er \#3 |  |
| Mar 18 | Day 37 of 107 | Gray whale ( | nd) Daily Totals Whales 22 Calves 0 |
|  | Sighting Number 06 | Quality: Poor <br> Beaufort: 2 | Total 2 - 0 Calves at sighting |
|  |  | 10:19-PDT | Saw: Blow |
|  |  | 17:19-GMT | Position: $115^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 10:24-PDT | Saw: |
|  |  | 17:24-GMT | Position: $122^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  | 10:32-PDT | Saw: Blow |
|  |  | 17:32-GMT | Position: $134^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 10:36-PDT | Saw: Blow |
|  |  | 17:36-GMT | Position: $144^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  |  | 10:39-PDT | Saw: Blow |
|  |  | 17:39-GMT | Position: $156^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 10:47-PDT | Saw: Body Route past Holly: Inside |
|  |  | 17:47-GMT | Position: 189 / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | Sighting Number 08 | Quality: Poor <br> Beaufort: 2 | Total 3-0 Calves at sighting |
|  |  | 10:38-PDT | Saw: Blow |
|  |  | 17:38-GMT | Position: $116^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |
|  |  | 10:53-PDT | Saw: Blow |
|  |  | 17:53-GMT | Position: $119^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | 11:11-PDT | Saw: Blow |
|  |  | 18:11-GMT | Position: $134^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 11:23-PDT | Saw: Blow |
|  |  | 18:23-GMT | Position: 158 / 1922 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  |  | 11:30-PDT | Saw: Blow |
|  |  | 18:30-GMT | Position: $177^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 11:36-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 18:36-GMT | Position: $217^{\circ} / 883 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
| Sighting Number 14 |  | Quality: Fair | Total 2 - 0 Calves at sighting |
|  |  | Beaufort: 2 |  |
|  |  | 11:40-PDT | Saw: Blow |
|  |  | 18:40-GMT | Position: $111^{\circ} / 5027 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 11:48-PDT | Saw: Blow |
|  |  | 18:48-GMT | Position: $118^{\circ} / 5027$ m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 11:54-PDT | Saw: Body |
|  |  | 18:54-GMT | Position: 117 / 5027 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 12:01-PDT | Saw: Blow |
|  |  | 19:01-GMT | Position: $130^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 12:06-PDT | Saw: Blow |
|  |  | 19:06-GMT | Position: $134^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:15-PDT | Saw: Blow |
|  |  | 19:15-GMT | Position: $154{ }^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:19-PDT | Saw: Blow |
|  |  | 19:19-GMT | Position: $168^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 12:30-PDT | Saw: Body |
|  |  | 19:30-GMT | Position: $186^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |
|  |  | 12:36-PDT | Saw: Blow |
|  |  | 19:36-GMT | Position: $213^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 15 |  | Quality: Fair Beaufort: 2 | Total 2 - 0 Calves at sighting |
|  |  | 11:47-PDT | Saw: Blow |
|  |  | 18:47-GMT | Position: $120^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 11:53-PDT | Saw: Body |
|  |  | 18:53-GMT | Position: $136^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 12:09-PDT | Saw: Blow |
|  |  | 19:09-GMT | Position: $167^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:17-PDT | Saw: Body |
|  |  | 19:17-GMT | Position: 187 / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 12:23-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 19:23-GMT | Position: $205^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 18 |  | Quality: Fair <br> Beaufort: 2 | Total 1 - 0 Calves at sighting |
|  |  | 12:20-PDT | Saw: Blow |
|  |  | 19:20-GMT | Position: $125^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 12:45-PDT | Saw: Blow Route past Holly: nd |
|  |  | 19:45-GMT | Position: $168^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 26 |  | Quality: Fair <br> Beaufort: 2 | Total 1 - 0 Calves at sighting |
|  |  | 13:29-PDT | CueTip: Boat / Saw: Blow |
|  |  | 20:29-GMT | Position: $133^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | Captain Eric ID'd as cow/calf pair, but we could not ID calf |  |
|  |  | 13:40-PDT | Saw: Blow |
|  |  | 20:40-GMT | Position: $139^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | 13:54-PDT | Saw: Blow |
|  |  | 20:54-GMT | Position: $159^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 14:07-PDT | Saw: Blow |
|  |  | 21:07-GMT | Position: $179^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 14:21-PDT | Saw: Blow Route past Holly: nd |
|  |  | 21:21-GMT | Position: $190^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number | 29 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  |  | Beaufort: 2 |  |
|  |  | 14:21-PDT | Saw: Blow |
|  |  | 21:21-GMT | Position: $130^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 14:27-PDT | Saw: Body |
|  |  | 21:27-GMT | Position: $148^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling $^{\text {a }}$ |
|  |  | 14:31-PDT | Saw: Blow |
|  |  | 21:31-GMT | Position: $169^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 14:38-PDT | Saw: Blow |
|  |  | 21:38-GMT | Position: $213^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 14:46-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 21:46-GMT | Position: $259^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number | 30 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  |  | Beaufort: 3 |  |
|  |  | 14:24-PDT | Saw: Body |
|  |  | 21:24-GMT | Position: $125^{\circ}$ / 913 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  | 14:31-PDT | Saw: Blow |
|  |  | 21:31-GMT | Position: $160^{\circ}$ / 471 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 14:37-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 21:37-GMT | Position: $224^{\circ}$ / 447 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number | 31 | Quality: Fair | Total 3-0 Calves at sighting |
|  |  | Beaufort: 3 |  |
|  |  | 14:59-PDT | Saw: Blow |
|  |  | 21:59-GMT | Position: $172^{\circ} / 5027 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 15:05-PDT | Saw: Blow |
|  |  | 22:05-GMT | Position: $175^{\circ} / 5027 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 15:07-PDT | Saw: Blow |
|  |  | 22:07-GMT | Position: $178{ }^{\circ} / 5027 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 15:12-PDT | Saw: Blow |
|  |  | 22:12-GMT | Position: 179 / 5027 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 15:19-PDT | Saw: Blow |
|  |  | 22:19-GMT | Position: 184 / 5027 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 15:27-PDT | Saw: Blow |
|  |  | 22:27-GMT | Position: $190^{\circ}$ / 5027 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 15:36-PDT | Saw: Blow |
|  |  | 22:36-GMT | Position: 198 / 5027 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 15:44-PDT | Saw: Blow Route past Holly: Outside |
|  |  | 22:44-GMT | Position: $205^{\circ}$ / 5027 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number | 32 | Quality: Fair | Total 3-0 Calves at sighting |
|  |  | Beaufort: 3 |  |
|  |  | 15:07-PDT | Saw: Blow |
|  |  | 22:07-GMT | Position: $175^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:10-PDT | Saw: Blow |
|  |  | 22:10-GMT | Position: 179 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:17-PDT | Saw: Blow |
|  |  | 22:17-GMT | Position: $189^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

| Sighting Number 25 | Quality: Fair Beaufort: 1 | Total 3-0 Calves at sighting |
| :---: | :---: | :---: |
|  | 13:12-PDT | Saw: Blow |
|  | 20:12-GMT | Position: $106^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |
|  | 13:15-PDT | Saw: Blow |
|  | 20:15-GMT | Position: 109 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:18-PDT | Saw: Blow |
|  | 20:18-GMT | Position: $109^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:25-PDT | Saw: Blow |
|  | 20:25-GMT | Position: $117^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:28-PDT | Saw: Body |
|  | 20:28-GMT | Position: 120 / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:40-PDT | Saw: Blow |
|  | 20:40-GMT | Position: $145^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:55-PDT | Saw: Blow Route past Holly: Inside |
|  | 20:55-GMT | Position: $227^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 26 | Quality: Fair Beaufort: 1 | Total 2 - 0 Calves at sighting |
|  | 13:17-PDT | Saw: Blow |
|  | 20:17-GMT | Position: $107^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | SUP trying to interact with Er |  |
|  | 13:24-PDT | Saw: Blow |
|  | 20:24-GMT | Position: 119 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:54-PDT | Saw: Blow |
|  | 20:54-GMT | Position: $200^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:58-PDT | Saw: Blow Route past Holly: Inside |
|  | 20:58-GMT | Position: $210^{\circ} / 1674$ m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 28 | Quality: Fair Beaufort: 1 | Total 2 - 0 Calves at sighting |
|  | 13:24-PDT | Saw: Blow |
|  | 20:24-GMT | Position: $115^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:30-PDT | Saw: Blow |
|  | 20:30-GMT | Position: $119^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:52-PDT | Saw: Body |
|  | 20:52-GMT | Position: $182^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:55-PDT | Saw: Blow Route past Holly: nd |
|  | 20:55-GMT | Position: 191 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 32 | Quality: Fair Beaufort: 1 | Total 1 - 0 Calves at sighting |
|  | 14:16-PDT | Saw: Body |
|  | 21:16-GMT | Position: $177^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 14:37-PDT | Saw: Body Route past Holly: nd |
|  | 21:37-GMT | Position: $259^{\circ} / 2749$ m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 35 | Quality: Fair Beaufort: 1 | Total 3-0 Calves at sighting |
|  | 14:40-PDT | Saw: Blow |
|  | 21:40-GMT | Position: $123^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  |
|  | 14:45-PDT | Saw: Blow |
|  | 21:45-GMT | Position: 128² 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:55-PDT | Saw: Body |
|  | 21:55-GMT | Position: $159^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |
|  | 15:04-PDT | Saw: Blow |
|  | 22:04-GMT | Position: $192^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |


|  |  |  | 15:10-PDT | Saw: Blow Route past Holly: Inside |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 22:10-GMT | Position: $224^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | Sighting Number | 36 | Quality: Fair | Total 2 - 0 Calves at sighting |
|  |  |  | Beaufort: 1 |  |
|  |  |  | 14:41-PDT | Saw: Blow |
|  |  |  | 21:41-GMT | Position: $125^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 14:45-PDT | Saw: Blow |
|  |  |  | 21:45-GMT | Position: $129^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  |  | 14:48-PDT | Saw: Blow |
|  |  |  | 21:48-GMT | Position: $132^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 14:53-PDT | Saw: Blow |
|  |  |  | 21:53-GMT | Position: $137^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 14:59-PDT | Saw: Blow |
|  |  |  | 21:59-GMT | Position: $149^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 15:19-PDT | Saw: Blow |
|  |  |  | 22:19-GMT | Position: $210^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 15:23-PDT | Saw: Blow |
|  |  |  | 22:23-GMT | Position: $219^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 15:25-PDT | Saw: Blow |
|  |  |  | 22:25-GMT | Position: $229^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 15:35-PDT | Saw: Blow Route past Holly: Outside |
|  |  |  | 22:35-GMT | Position: $242^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | Sighting Number | 50 | Quality: Fair | Total 4-0 Calves at sighting |
|  |  |  | Beaufort: 1 |  |
|  |  |  | 16:35-PDT | Saw: Blow |
|  |  |  | 23:35-GMT | Position: 117 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 16:41-PDT | Saw: Blow |
|  |  |  | 23:41-GMT | Position: $128^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  |  | 16:45-PDT | Saw: Body |
|  |  |  | 23:45-GMT | Position: $144^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 16:48-PDT | Saw: Body |
|  |  |  | 23:48-GMT | Position: $153^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 16:52-PDT | Saw: Blow |
|  |  |  | 23:52-GMT | Position: 170 / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  |  | 16:55-PDT | Saw: Blow |
|  |  |  | 23:55-GMT | Position: $191^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  |  | 16:58-PDT | Saw: Blow Route past Holly: Inside |
|  |  |  | 23:58-GMT | Position: $210^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| Mar 20 | Day 39 of 107 |  | Gray whale ( | nd) Daily Totals Whales 25 Calves 0 |
|  | Sighting Number | 03 | Quality: Poor Beaufort: 0 | Total 2-0 Calves at sighting |
|  |  |  | 09:53-PDT | Saw: Blow |
|  |  |  | 16:53-GMT | Position: $134^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 10:00-PDT | Saw: Blow Route past Holly: Inside |
|  |  |  | 17:00-GMT | Position: $164^{\circ} / 1020 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | Sighting Number | 07 | Quality: Poor <br> Beaufort: 0 | Total 2 - 0 Calves at sighting |
|  |  |  | 10:12-PDT | Saw: Blow |
|  |  |  | 17:12-GMT | Position: $127^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 10:17-PDT | Saw: Blow |
|  |  |  | 17:17-GMT | Position: $137^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 10:22-PDT | Saw: Blow |
|  |  |  | 17:22-GMT | Position: 149 / 1674 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |

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| Sighting Number 29 | Quality: Fair <br> Beaufort: 3 | Total 3-0 Calves at sighting |
| :---: | :---: | :---: |
|  | 14:32-PDT | Saw: Blow |
|  | 21:32-GMT | Position: $112^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:37-PDT | Saw: Blow |
|  | 21:37-GMT | Position: $117^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:42-PDT | Saw: Blow |
|  | 21:42-GMT | Position: $123^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:45-PDT | Saw: Blow |
|  | 21:45-GMT | Position: 130 / 1331 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:50-PDT | Saw: Blow |
|  | 21:50-GMT | Position: $162^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | $14: 58$-PDT | Saw: Blow Route past Holly: Inside |
|  | 21:58-GMT | Position: $230^{\circ}$ / 661 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
| Sighting Number 30 | Quality: Fair | Total 3-0 Calves at sighting |
|  | Beaufort: 3 |  |
|  | 14:39-PDT | Saw: Blow |
|  | 21:39-GMT | Position: 102 / 5027 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:05-PDT | Saw: Blow |
|  | 22:05-GMT | Position: $109^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:14-PDT | Saw: Blow |
|  | 22:14-GMT | Position: 120 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:27-PDT | Saw: Blow |
|  | 22:27-GMT | Position: $137^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 15:37-PDT | Saw: Blow |
|  | 22:37-GMT | Position: $164^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:39-PDT | Saw: Blow |
|  | 22:39-GMT | Position: $174^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:43-PDT | Saw: Blow |
|  | 22:43-GMT | Position: $199^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:50-PDT | Saw: Blow Route past Holly: nd |
|  | 22:50-GMT | Position: $225^{\circ}$ / 946 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 31 | Quality: Fair <br> Beaufort: 3 | Total 4-0 Calves at sighting |
|  | 14:41-PDT | Saw: Blow |
|  | 21:41-GMT | Position: 114 / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:48-PDT | Saw: Blow |
|  | 21:48-GMT | Position: $120^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:54-PDT | Saw: Blow |
|  | 21:54-GMT | Position: 128 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:02-PDT | Saw: Blow |
|  | 22:02-GMT | Position: $140^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:09-PDT | Saw: Blow |
|  | 22:09-GMT | Position: $158^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 15:20-PDT | Saw: Blow |
|  | 22:20-GMT | Position: 190 / 1922 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 15:23-PDT | Saw: Blow |
|  | 22:23-GMT | Position: $200^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 15:26-PDT | Saw: Blow Route past Holly: nd |
|  | 22:26-GMT | Position: 214 / 1674 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |

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|  | Sighting Number 37 | Quality: Fair Beaufort: 3 | Total 3-0 Calves at sighting |
| :---: | :---: | :---: | :---: |
|  |  | 16:16-PDT | Saw: Blow |
|  |  | 23:16-GMT | Position: $99^{\circ} / 3528$ m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:28-PDT | Saw: Blow |
|  |  | 23:28-GMT | Position: $106^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:37-PDT | Saw: Blow |
|  |  | 23:37-GMT | Position: $113^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:45-PDT | Saw: Blow |
|  |  | 23:45-GMT | Position: $125^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:51-PDT | Saw: Blow |
|  |  | 23:51-GMT | Position: $144^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:57-PDT | Saw: Blow Route past Holly: nd |
|  |  | 23:57-GMT | Position: $178^{\circ}$ / 946 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Mar 21 | Day 40 of 107 | Gray whale ( | nd) Daily Totals Whales 12 Calves 0 |
|  | Sighting Number 01 | Quality: Poor <br> Beaufort: 0 | Total 3-0 Calves at sighting |
|  |  | 09:10-PDT | Saw: Blow |
|  |  | 16:10-GMT | Position: $115^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 09:13-PDT | Saw: Blow |
|  |  | 16:13-GMT | Position: $118^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |
|  |  | 09:15-PDT | Saw: Blow |
|  |  | 16:15-GMT | Position: $121^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 09:18-PDT | Saw: Blow |
|  |  | 16:18-GMT | Position: $121^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 09:24-PDT | Saw: Blow |
|  |  | 16:24-GMT | Position: 145 / 946 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 09:26-PDT | Saw: Blow |
|  |  | 16:26-GMT | Position: $161^{\circ}$ / 946 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 09:28-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 16:28-GMT | Position: 173 / 661 m Direction: West; Behavior: Speed slow - Traveling |
|  | Sighting Number 21 | Quality: Poor | Total 1 - 0 Calves at sighting |
|  |  | Beaufort: 1 |  |
|  |  | 13:22-PDT | Saw: Blow |
|  |  | 20:22-GMT | Position: $110^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 13:25-PDT | Saw: Blow |
|  |  | 20:25-GMT | Position: $108^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow P Traveling $^{\text {a }}$ |
|  |  | 13:30-PDT | Saw: Blow |
|  |  | 20:30-GMT | Position: $112^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 13:34-PDT | Saw: Blow |
|  |  | 20:34-GMT | Position: $115^{\circ} / 1403 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 13:39-PDT | Saw: Blow |
|  |  | 20:39-GMT | Position: $125^{\circ}$ / 946 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 13:44-PDT | Saw: Blow |
|  |  | 20:44-GMT | Position: $151^{\circ} / 574 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 13:46-PDT | Saw: Body |
|  |  | 20:46-GMT | Position: $168^{\circ}$ / 455 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 13:49-PDT | Saw: Body |
|  |  | 20:49-GMT | Position: $145^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 13:53-PDT | Saw: Body Route past Holly: Inside |
|  |  | 20:53-GMT | Position: $236{ }^{\circ}$ / 600 m Direction: West; Behavior: Speed slow • Traveling • Breach |


|  | Sighting Number | 23 | Quality: Poor Beaufort: 2 | Total 5-0 Calves at sighting |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | 13:58-PDT | Saw: Blow |
|  |  |  | 20:58-GMT | Position: $119^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | Slightly separated |  |
|  |  |  | 14:07-PDT | Saw: Blow |
|  |  |  | 21:07-GMT | Position: $126^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 14:09-PDT | Saw: Body |
|  |  |  | 21:09-GMT | Position: $135^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 14:15-PDT | Saw: Blow |
|  |  |  | 21:15-GMT | Position: $160^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  |  |  | 14:24-PDT | Saw: Body |
|  |  |  | 21:24-GMT | Position: $197^{\circ}$ / 1208 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | 14:29-PDT | Saw: Body Route past Holly: Inside |
|  |  |  | 21:29-GMT | Position: $226^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | Sighting Number | 24 | Quality: Poor | Total 1 - 0 Calves at sighting Disappeared |
|  |  |  | Beaufort: 2 |  |
|  |  |  | 14:21-PDT | Saw: Blow Route past Holly: nd |
|  |  |  | 21:21-GMT | Position: 139 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  | Disappeared after ID |  |
|  | Sighting Number | 32 | Quality: Poor | Total 2 - 0 Calves at sighting |
|  |  |  | Beaufort: 3 |  |
|  |  |  | 16:52-PDT | Saw: Blow |
|  |  |  | 23:52-GMT | Position: $148^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
| Mar 22 | Day 41 of 107 |  | Gray whale (northbound) | nd) Daily Totals Whales 21 Calves 0 |
|  | Sighting Number | 06 | Quality: Poor <br> Beaufort: 0 | Total 2 - 0 Calves at sighting |
|  |  |  | 09:34-PDT | Saw: Blow |
|  |  |  | 16:34-GMT | Position: $200^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 09:47-PDT | Saw: Blow Route past Holly: Inside |
|  |  |  | 16:47-GMT | Position: $240^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow - Traveling |
|  | Sighting Number | 18 | Quality: Poor | Total 2 - 0 Calves at sighting |
|  |  |  | Beaufort: 0 |  |
|  |  |  | 12:52-PDT | CueTip: Passerby / Saw: Body |
|  |  |  | 19:52-GMT | Position: $189^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Fluke $\bullet$ Pec slap • |
|  |  |  | 13:00-PDT | Saw: Blow |
|  |  |  | 20:00-GMT | Position: $220^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 13:08-PDT | Saw: Blow Route past Holly: Inside |
|  |  |  | 20:08-GMT | Position: $238^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow P Traveling $^{\text {a }}$ |
|  | Sighting Number | 20 | Quality: Poor | Total 1 - 0 Calves at sighting |
|  |  |  | Beaufort: 0 |  |
|  |  |  | 13:01-PDT | Saw: Body |
|  |  |  | 20:01-GMT | Position: $227^{\circ} / 539 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling $^{\text {a }}$ |
|  |  |  | 13:05-PDT | Saw: Blow Route past Holly: Inside |
|  |  |  | 20:05-GMT | Position: $239^{\circ}$ / 661 m Direction: West; Behavior: Speed slow - Traveling |
|  | Sighting Number | 25 | Quality: Fair | Total 5-0 Calves at sighting |
|  |  |  | Beaufort: 1 |  |
|  |  |  | 14:14-PDT | Saw: Blow |
|  |  |  | 21:14-GMT | Position: $110^{\circ} / 5027 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 14:26-PDT | Saw: Blow |
|  |  |  | 21:26-GMT | Position: $112^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  |  | 14:32-PDT | Saw: Blow |
|  |  |  | 21:32-GMT | Position: 114 / 3528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |

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|  |  | 15:53-PDT |  |
| :---: | :---: | :---: | :---: |
|  |  | 22:53-GMT | Position: $195^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Sighting Number 32 | Quality: Fair | Total 2 - 0 Calves at sighting |
|  |  | Beaufort: 1 |  |
|  |  | 15:49-PDT | Saw: Blow |
|  |  | 22:49-GMT | Position: $151^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:56-PDT | Saw: Blow |
|  |  | 22:56-GMT | Position: $160^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 16:02-PDT | Saw: Blow |
|  |  | 23:02-GMT | Position: $172^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 16:08-PDT | Saw: Blow |
|  |  | 23:08-GMT | Position: $185^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 16:14-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 23:14-GMT | Position: 197% 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | Sighting Number 34 | Quality: Fair | Total 2 - 0 Calves at sighting |
|  |  | Beaufort: 1 |  |
|  | Images: 9428-99 | 16:02-PDT | Saw: Blow |
|  |  | 23:02-GMT | Position: $110^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | Had all makings of over each other. Ma | cow/calf pair, but may have been mating. Two whales, but wrapped up and all have seen big blow/little puff and may have seen calf fluke and knuckles. |
|  |  | 16:06-PDT | Saw: Blow |
|  |  | 23:06-GMT | Position: $116^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 16:19-PDT | Saw: Blow |
|  |  | 23:19-GMT | Position: $124^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 16:27-PDT | Saw: Blow |
|  |  | 23:27-GMT | Position: $124^{\circ} / 1208 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  |  | 16:38-PDT | Saw: Body |
|  |  | 23:38-GMT | Position: 148 / 629 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |
|  |  | 16:49-PDT | Saw: Body |
|  |  | 23:49-GMT | Position: $164^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Rolling |
|  |  | 17:02-PDT | Saw: Body |
|  |  | 0:02; 3/23/2014-GMT | Position: 204 / 412 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |
|  |  | 17:08-PDT | Saw: Body |
|  |  | 0:08; 3/23/2014-GMT | Position: $225^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 17:14-PDT | Saw: Body |
|  |  | 0:14; 3/23/2014-GMT | Position: $251^{\circ} / 528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 17:16-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 0:16; 3/23/2014-GMT | Position: $267^{\circ}$ / 735 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | Sighting Number 36 | Quality: Fair | Total $2-0$ Calves at sighting |
|  |  | Beaufort: 1 |  |
|  |  | 16:17-PDT | Saw: Blow |
|  |  | 23:17-GMT | Position: $206^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 16:21-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 23:21-GMT | Position: $212^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| Mar 23 | Day 42 of 107 | Gray whale (northb | nd) Daily Totals Whales 28 Calves 0 |
|  | Sighting Number 01 | Quality: Fair Beaufort: 1 | Total 2 - 0 Calves at sighting |
|  |  | 09:02-PDT | Saw: Blow |
|  |  | 16:02-GMT | Position: $155^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 09:11-PDT | Saw: Blow |
|  |  | 16:11-GMT | Position: $203^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 09:17-PDT | Saw: Body Route past Holly: Inside |
|  |  | 16:17-GMT | Position: $231^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

| Sighting Number | 09 | Quality: Fair <br> Beaufort: 1 | Total 3-0 Calves at sighting |
| :---: | :---: | :---: | :---: |
|  |  | 09:43-PDT | Saw: Blow |
|  |  | 16:43-GMT | Position: $121^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  | 09:47-PDT | Saw: Blow |
|  |  | 16:47-GMT | Position: 133 / 1331 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 09:49-PDT | Saw: Blow |
|  |  | 16:49-GMT | Position: $141^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 09:55-PDT | Saw: Blow |
|  |  | 16:55-GMT | Position: $173^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 10:00-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 17:00-GMT | Position: $229^{\circ} / 778$ m Direction: West; Behavior: Speed slow - Traveling • Fluke |
| Sighting Number | 14 | Quality: Fair <br> Beaufort: 1 | Total 2 - 0 Calves at sighting |
|  |  | 10:14-PDT | Saw: Blow |
|  |  | 17:14-GMT | Position: 113 / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 10:16-PDT | Saw: Blow |
|  |  | 17:16-GMT | Position: $116^{\circ} / 946 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  | 10:21-PDT | Saw: Blow |
|  |  | 17:21-GMT | Position: $132^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  |  | 10:29-PDT | Saw: Body Route past Holly: Inside |
|  |  | 17:29-GMT | Position: $212^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
| Sighting Number | 21 | Quality: Fair <br> Beaufort: 2 | Total 3-0 Calves at sighting |
|  |  | 12:29-PDT | Saw: Blow |
|  |  | 19:29-GMT | Position: $139^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 12:37-PDT | Saw: Blow |
|  |  | 19:37-GMT | Position: $158^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 12:45-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 19:45-GMT | Position: $195^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
| Sighting Number | 22 | Quality: Fair <br> Beaufort: 2 | Total 5 - 0 Calves at sighting |
|  |  | 12:30-PDT | Saw: Blow |
|  |  | 19:30-GMT | Position: $209^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:39-PDT | Saw: Blow |
|  |  | 19:39-GMT | Position: $114^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:42-PDT | Saw: Blow |
|  |  | 19:42-GMT | Position: 118 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:46-PDT | Saw: Blow |
|  |  | 19:46-GMT | Position: 128 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | Group sepa | are now a few degrees apart |
|  |  | 12:52-PDT | Saw: Blow |
|  |  | 19:52-GMT | Position: $135^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:59 -PDT | Saw: Blow |
|  |  | 19:59-GMT | Position: $149^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 13:01-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 20:01-GMT | Position: $156^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number | 24 | Quality: Fair Beaufort: 3 | Total 2 - 0 Calves at sighting |
|  |  | 13:05-PDT | Saw: Blow |
|  |  | 20:05-GMT | Position: $120^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 13:12-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 20:12-GMT | Position: $141^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |



2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  |  |
| :---: | :---: | :---: |
|  | 11:23-PDT | Saw: Body |
|  | 18:23-GMT | Position: $156^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:29-PDT | Saw: Body |
|  | 18:29-GMT | Position: $165^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:37-PDT | Saw: Body |
|  | 18:37-GMT | Position: $181^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:46-PDT | Saw: Body |
|  | 18:46-GMT | Position: $198{ }^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:57-PDT | Saw: Blow |
|  | 18:57-GMT | Position: $226^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:03-PDT | Saw: Body Route past Holly: Inside |
|  | 19:03-GMT | Position: $251^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 18 | Quality: Poor | Total $2-0$ Calves at sighting |
|  | Beaufort: 0 |  |
|  | 11:41-PDT | Saw: Body |
|  | 18:41-GMT | Position: $166^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:45-PDT | Saw: Body |
|  | 18:45-GMT | Position: $179{ }^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:49-PDT | Saw: Blow |
|  | 18:49-GMT | Position: $198^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:56-PDT | Saw: Blow Route past Holly: Inside |
|  | 18:56-GMT | Position: $226^{\circ}$ / 1208 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 22 | Quality: Poor | Total 3-0 Calves at sighting |
|  | Beaufort: 0 |  |
|  | 12:36-PDT | Saw: Blow |
|  | 19:36-GMT | Position: 110 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:39-PDT | Saw: Blow |
|  | 19:39-GMT | Position: $113^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:42-PDT | Saw: Blow |
|  | 19:42-GMT | Position: $116^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:44-PDT | Saw: Blow |
|  | 19:44-GMT | Position: 117 / 1331 m Direction: West; Behavior: Speed slow - Traveling |
|  | 12:48-PDT | Saw: Blow |
|  | 19:48-GMT | Position: $124^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow - Traveling |
|  | 12:51-PDT | Saw: Blow |
|  | 19:51-GMT | Position: $138^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:53-PDT | Saw: Blow |
|  | 19:53-GMT | Position: $152^{\circ}$ / 661 m Direction: West; Behavior: Speed slow - Traveling |
|  | Along kelp |  |
|  | 12:55-PDT | Saw: Blow |
|  | 19:55-GMT | Position: $174^{\circ}$ / 550 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:57-PDT | Saw: Blow |
|  | 19:57-GMT | Position: 188 / 550 m Direction: West; Behavior: Speed slow - Traveling |
|  | 12:59-PDT | Saw: Blow |
|  | 19:59-GMT | Position: 208 / 550 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:04-PDT | Saw: Blow Route past Holly: Inside |
|  | 20:04-GMT | Position: $249^{\circ}$ / 946 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 25 | Quality: Poor <br> Beaufort: 0 | Total 2 - 1 Calf at sighting |
| Images: 9644-91 | 13:49-PDT | Saw: Blow |
|  | 20:49-GMT | Position: $112^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | Very slow and | th surfaced a lot. Calf surfaced more. |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  | 09:55-PDT | Saw: Blow |
| :---: | :---: | :---: |
|  | 16:55-GMT | Position: $124^{\circ}$ / 1208 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:01-PDT | Saw: Body Route past Holly: Inside |
|  | 17:01-GMT | Position: 155 / 661 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 12 | Quality: Poor | Total 2-1 Calf at sighting |
|  | Beaufort: 1 |  |
| Images: 9722-3 | 10:24-PDT | Saw: Body |
|  | 17:24-GMT | Position: $130^{\circ} / 1403 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Slow, but not very slow travel. Calf moved around-saw first behind, then in front; probably on ocean side (not seen) |  |
|  | 10:25-PDT | Saw: Body |
|  | 17:25-GMT | Position: $139^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:28-PDT | Saw: Body |
|  | 17:28-GMT | Position: 157 / 946 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:32-PDT | Saw: Body |
|  | 17:32-GMT | Position: 193 / 778 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 10:36-PDT | Saw: Blow Route past Holly: Inside |
|  | 17:36-GMT | Position: $226^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
| Sighting Number 24 | Quality: Fair | Total 3-0 Calves at sighting |
|  | Beaufort: 3 |  |
|  | 13:15-PDT | Saw: Blow |
|  | 20:15-GMT | Position: $112^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:18-PDT | Saw: Blow |
|  | 20:18-GMT | Position: $114^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:24-PDT | Saw: Blow |
|  | 20:24-GMT | Position: $119^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:30-PDT | Saw: Blow |
|  | 20:30-GMT | Position: $123^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:34-PDT | Saw: Blow |
|  | 20:34-GMT | Position: $135^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:36-PDT | Saw: Blow |
|  | 20:36-GMT | Position: $140^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:38-PDT | Saw: Blow |
|  | 20:38-GMT | Position: $146^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:41-PDT | Saw: Blow |
|  | 20:41-GMT | Position: $160^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 13:46-PDT | Saw: Blow |
|  | 20:46-GMT | Position: $179^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:48-PDT | Saw: Body Route past Holly: Inside |
|  | 20:48-GMT | Position: $200^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 27 | Quality: Fair | Total 2 - 0 Calves at sighting |
|  | Beaufort: 3 |  |
|  | 13:44-PDT | Saw: Blow |
|  | 20:44-GMT | Position: $108^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:51-PDT | Saw: Blow |
|  | 20:51-GMT | Position: $114^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:57-PDT | Saw: Blow |
|  | 20:57-GMT | Position: $121^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:08-PDT | Saw: Blow |
|  | 21:08-GMT | Position: $165^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:14-PDT | Saw: Blow Route past Holly: Inside |
|  | 21:14-GMT | Position: $212^{\circ}$ / 778 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |


| Sighting Number 28 | Quality: Fair <br> Beaufort: 3 | Total 5-1 Calf at sighting |
| :---: | :---: | :---: |
| Images: 9759-9920 | 13:47-PDT | Saw: Blow |
|  | 20:47-GMT | Position: 114 / 3528 m Direction: West; Behavior: Speed slow • Traveling |
|  | Group split and 3 adults left cow/calf pair behind in front of counter point. Mom spyhopped, then slipped away while calf played with kelp. Calf was by itself for almost one hour before the mom reappeared and the two continued west. |  |
|  | 13:54-PDT | Saw: Blow |
|  | 20:54-GMT | Position: 114 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:01-PDT | Saw: Blow |
|  | 21:01-GMT | Position: $115^{\circ} / 3088 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:04-PDT | Saw: Blow |
|  | 21:04-GMT | Position: $115^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:10-PDT | Saw: Blow |
|  | 21:10-GMT | Position: $116^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:18-PDT | Saw: Blow |
|  | 21:18-GMT | Position: $125^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 14:25-PDT | Saw: Blow |
|  | 21:25-GMT | Position: $134^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 14:28-PDT | Saw: Blow |
|  | 21:28-GMT | Position: 144 / 946 m Direction: West; Behavior: Speed slow ${ }^{\text {e Traveling } \bullet \text { Fluke }}$ |
|  | 14:33-PDT | Saw: Blow |
|  | 21:33-GMT | Position: $159^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | Split into two groups-lead: 3, trailing: 2 (c/c pair) |  |
|  | 14:35-PDT | Saw: Blow |
|  | 21:35-GMT | Position: $161^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Spyhop $\bullet$ |
|  | C/C pair |  |
|  | 14:37-PDT | Saw: Blow |
|  | 21:37-GMT | Position: $164^{\circ} / 600 \mathrm{~m}$ Direction: Still; Behavior: Speed slow $\bullet$ Spyhop • Rolling |
|  | 14:41-PDT | Saw: Blow |
|  | 21:41-GMT | Position: $164^{\circ}$ / 600 m Direction: Still; Behavior: Speed slow • Rolling |
|  | 14:43-PDT | Saw: Body |
|  | 21:43-GMT | Position: $167^{\circ} / 600 \mathrm{~m}$ Direction: Still; Behavior: Speed slow $\bullet$ Rolling |
|  | 14:47-PDT | Saw: Body |
|  | 21:47-GMT | Position: $167^{\circ} / 600 \mathrm{~m}$ Direction: Still; Behavior: Speed slow $\bullet$ Spyhop $\bullet$ Rolling |
|  | Calf |  |
|  | 15:01-PDT | Saw: Body |
|  | 22:01-GMT | Position: $174^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |
|  | 15:04-PDT | Saw: Body |
|  | 22:04-GMT | Position: 179 / 528 m Direction: West; Behavior: Speed slow - Traveling • Spyhop - |
|  | 15:10-PDT | Saw: Blow |
|  | 22:10-GMT | Position: 134 / 489 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 15:14-PDT | Saw: Blow Route past Holly: Inside |
|  | 22:14-GMT | Position: $258{ }^{\circ}$ / 946 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 35 | Quality: Good Beaufort: 3 | Total 2 - 0 Calves at sighting |
|  | 16:45-PDT | Saw: Blow |
|  | 23:45-GMT | Position: 191 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 16:49-PDT | Saw: Blow |
|  | 23:49-GMT | Position: $211^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 16:54-PDT | Saw: Blow |
|  | 23:54-GMT | Position: $229^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 16:58-PDT | Saw: Blow Route past Holly: Inside |
|  | 23:58-GMT | Position: $239^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |



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2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  |  |
| :---: | :---: | :---: |
|  | 12:24-PDT | Saw: Blow |
|  | 19:24-GMT | Position: 190 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:29-PDT | Saw: Blow Route past Holly: nd |
|  | 19:29-GMT | Position: 200 / 2260 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 13 | Quality: Good | Total 4-0 Calves at sighting |
|  | Beaufort: 4 |  |
|  | 11:46-PDT | Saw: Blow |
|  | 18:46-GMT | Position: $138^{\circ} / 5027 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:56-PDT | Saw: Blow |
|  | 18:56-GMT | Position: $141^{\circ}$ / 5027 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:06-PDT | Saw: Blow |
|  | 19:06-GMT | Position: $146^{\circ}$ / 5027 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:21-PDT | Saw: Blow |
|  | 19:21-GMT | Position: $155^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 12:34-PDT | Saw: Blow |
|  | 19:34-GMT | Position: $166^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:45-PDT | Saw: Blow Route past Holly: nd |
|  | 19:45-GMT | Position: $188^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 14 <br> Images: 0052-65 | Quality: Good Beaufort: 4 | Total 4-0 Calves at sighting |
|  | 12:03-PDT | Saw: Blow |
|  | 19:03-GMT | Position: 114 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:06-PDT | Saw: Blow |
|  | 19:06-GMT | Position: 117 / 2260 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | 12:08-PDT | Saw: Blow |
|  | 19:08-GMT | Position: $119^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:18-PDT | Saw: Blow |
|  | 19:18-GMT | Position: $156^{\circ}$ / 946 m Direction: West; Behavior: Speed slow - Traveling |
|  | 12:26-PDT | Saw: Blow Route past Holly: Inside |
|  | 19:26-GMT | Position: $212^{\circ}$ / 827 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 18 <br> Images: 0066-77 | Quality: Good Beaufort: 4 | Total 3-0 Calves at sighting |
|  | 13:49-PDT | CueTip: Phone / Saw: Blow |
|  | 20:49-GMT | Position: $99^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:53-PDT | Saw: Blow |
|  | 20:53-GMT | Position: $102^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:56-PDT | Saw: Blow |
|  | 20:56-GMT | Position: $104^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:00-PDT | Saw: Blow |
|  | 21:00-GMT | Position: $107^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:03-PDT | Saw: Blow |
|  | 21:03-GMT | Position: $108^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:08-PDT | Saw: Blow |
|  | 21:08-GMT | Position: $111^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:10-PDT | Saw: Blow |
|  | 21:10-GMT | Position: $114^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:13-PDT | Saw: Blow |
|  | 21:13-GMT | Position: 117 / 1674 m Direction: West; Behavior: Speed slow - Traveling |
|  | 14:17-PDT | Saw: Blow |
|  | 21:17-GMT | Position: $124^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow - Traveling |
|  | 14:20-PDT | Saw: Blow |
|  | 21:20-GMT | Position: $136^{\circ} / 1020 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |

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2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


| Sighting Number 03 | Quality: Fair <br> Beaufort: 3 | Total 1 - 0 Calves at sighting |
| :---: | :---: | :---: |
|  | 09:20-PDT | Saw: Blow |
|  | 16:20-GMT | Position: $122^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 09:28-PDT | Saw: Blow |
|  | 16:28-GMT | Position: $148^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:37-PDT | Saw: Blow |
|  | 16:37-GMT | Position: $219^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:39-PDT | Saw: Blow |
|  | 16:39-GMT | Position: $231^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:45-PDT | Saw: Blow Route past Holly: Inside |
|  | 16:45-GMT | Position: $267^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 05 | Quality: Fair | Total 2 - 0 Calves at sighting |
|  | Beaufort: 2 |  |
|  | 10:39-PDT | Saw: Blow |
|  | 17:39-GMT | Position: $150^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:40-PDT | Saw: Blow |
|  | 17:40-GMT | Position: 151 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:43-PDT | Saw: Blow |
|  | 17:43-GMT | Position: $157^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 10:46-PDT | Saw: Blow |
|  | 17:46-GMT | Position: $165^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:50-PDT | Saw: Blow |
|  | 17:50-GMT | Position: 175 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:52-PDT | Saw: Blow |
|  | 17:52-GMT | Position: 184/ 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:00-PDT | Saw: Blow Route past Holly: Inside |
|  | 18:00-GMT | Position: 204 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 15 <br> Images: 0208-44 | Quality: Poor Beaufort: 3 | Total 3-0 Calves at sighting |
|  | 15:05-PDT | Saw: Blow |
|  | 22:05-GMT | Position: $100^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:11-PDT | Saw: Blow |
|  | 22:11-GMT | Position: 106 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:14-PDT | Saw: Blow |
|  | 22:14-GMT | Position: 107 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:17-PDT | Saw: Blow |
|  | 22:17-GMT | Position: 108 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:20-PDT | Saw: Blow |
|  | 22:20-GMT | Position: 111 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:24-PDT | Saw: Blow |
|  | 22:24-GMT | Position: 111 / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:28-PDT | Saw: Blow |
|  | 22:28-GMT | Position: 114 $/ 1403 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 15:31-PDT | Saw: Blow |
|  | 22:31-GMT | Position: $115^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 15:33-PDT | Saw: Blow |
|  | 22:33-GMT | Position: $119^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:38-PDT | Saw: Blow |
|  | 22:38-GMT | Position: $148^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:42-PDT | Saw: Blow |
|  | 22:42-GMT | Position: $183^{\circ} / 356 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort



2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  | Sighting Number 21 | Quality: Fair Beaufort: 1 | Total 2 - 0 Calves at sighting |
| :---: | :---: | :---: | :---: |
|  |  | 15:44-PDT | Saw: Blow |
|  |  | 22:44-GMT | Position: 109 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:47-PDT | Saw: Blow |
|  |  | 22:47-GMT | Position: 112 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:49-PDT | Saw: Body |
|  |  | 22:49-GMT | Position: 114 / 1922 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Breach |
|  |  | 15:54-PDT | Saw: Blow |
|  |  | 22:54-GMT | Position: $122^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:58-PDT | Saw: Body |
|  |  | 22:58-GMT | Position: 134 / 913 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:05-PDT | Saw: Body |
|  |  | 23:05-GMT | Position: $183^{\circ} / 678 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:08-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 23:08-GMT | Position: $217^{\circ} / 574$ m Direction: West; Behavior: Speed slow - Traveling |
| Apr 10 | Day 60 of 107 | Gray whale (northbound) |  |
|  | Sighting Number 01 | Quality: Poor <br> Beaufort: 0 | Total 2 - 0 Calves at sighting |
|  |  | 09:19-PDT | Saw: Blow |
|  |  | 16:19-GMT | Position: $157^{\circ} / 946 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 09: -PDT | Saw: Blow |
|  |  | 16:-GMT | Position: $192^{\circ}$ / 778 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 09:26-PDT | Saw: Blow |
|  |  | 16:26-GMT | Position: $231^{\circ}$ / 778 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 09:30-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 16:30-GMT | Position: $255^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | Sighting Number 04 | Quality: Poor Beaufort: 0 | Total 2-1 Calf at sighting |
|  |  | 10:08-PDT | Saw: Blow |
|  |  | 17:08-GMT | Position: $122^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | Calf traveling alongside m | cow and shore- pretty direct and regular. Many regular surfacings. Saw calf 't see a lot of extra surfacing by calf. Both kept close to surface. |
|  |  | 10:10-PDT | Saw: Blow |
|  |  | 17:10-GMT | Position: $131^{\circ} / 1020 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 10:11-PDT | Saw: Blow |
|  |  | 17:11-GMT | Position: $136^{\circ} / 883 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 10:13-PDT | Saw: Blow |
|  |  | 17:13-GMT | Position: 154 / 696 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 10:20-PDT | Saw: Blow |
|  |  | 17:20-GMT | Position: $254^{\circ}$ / 600 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 10:23-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 17:23-GMT | Position: $281^{\circ} / 946 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Sighting Number 21 <br> Images: 0532-62 | Quality: Poor Beaufort: 0 | Total 2-1 Calf at sighting |
|  |  | 14:23-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 21:23-GMT | Position: 110 / 1403 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | First saw pai Surfaced sep | hing kelp after campus point. Continued traveling in kelp as it went by Holly. times-calf did not surface more frequently than mom. |
|  |  | 14:27-PDT | Saw: Body |
|  |  | 21:27-GMT | Position: $117^{\circ} / 946 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 14:29-PDT | Saw: Body |
|  |  | 21:29-GMT | Position: 123 / 696 m Direction: West; Behavior: Speed slow - Traveling |



2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


|  | 09:43-PDT | Saw: Blow |
| :---: | :---: | :---: |
|  | 16:43-GMT | Position: $277^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 09:49-PDT | Saw: Blow Route past Holly: Inside |
|  | 16:49-GMT | Position: 290 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 12 | Quality: Poor | Total 2 - 0 Calves at sighting |
|  | Beaufort: 2 |  |
|  | 10:10-PDT | Saw: Blow |
|  | 17:10-GMT | Position: $221^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | Saw body of large whale, but not smaller one. Saw big blows/little blows- saw big and little footprints |  |
|  | 10:13-PDT | Saw: Blow |
|  | 17:13-GMT | Position: $120^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:17-PDT | Saw: Blow |
|  | 17:17-GMT | Position: $132^{\circ}$ / 735 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:20-PDT | Saw: Blow |
|  | 17:20-GMT | Position: $157^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:22-PDT | Saw: Blow |
|  | 17:22-GMT | Position: $221^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:28-PDT | Saw: Blow Route past Holly: Inside |
|  | 17:28-GMT | Position: $267^{\circ}$ / 827 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number <br> 14 <br> Images: 0714-32 | Quality: Poor | Total 2 - 0 Calves at sighting |
|  | Beaufort: 2 |  |
|  | 11:08-PDT | Saw: Blow |
|  | 18:08-GMT | Position: $126^{\circ}$ / 827 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:13-PDT | Saw: Blow |
|  | 18:13-GMT | Position: $169^{\circ}$ / 827 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:14-PDT | Saw: Blow |
|  | 18:14-GMT | Position: $173^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:15-PDT | Saw: Blow |
|  | 18:15-GMT | Position: $190^{\circ}$ / 528 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:22-PDT | Saw: Blow |
|  | 18:22-GMT | Position: $214^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 11:25-PDT | Saw: Blow |
|  | 18:25-GMT | Position: $246^{\circ} / 661 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:28-PDT | Saw: Blow Route past Holly: Inside |
|  | 18:28-GMT | Position: $273^{\circ}$ / 550 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 17 | Quality: Poor Beaufort: 3 | Total 1-0 Calves at sighting |
|  | 11:44-PDT | Saw: Blow |
|  | 18:44-GMT | Position: 104 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | We only saw big whale, but acted very much like a C/c pair- slow traveling to and along kelp. Just past Sands kelp, big whale blew 5 times, stopped, and submerged- surfaced 10 minutes later in same area, and we did not see it again. Condor came to Sands kelp 15 minutes later- they saw 2 whales in kelp, but we did not see them. Very likely a C/c pair-How do we deal with 'likely C/c' in estimates? |  |
| Sighting Number 18 <br> Images: 0734 | Quality: Poor Beaufort: 3 | Total 2-1 Calf at sighting |
|  | 11:47-PDT | Saw: Blow |
|  | 18:47-GMT | Position: 180 / 574 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:52-PDT | Saw: Body Route past Holly: Inside |
|  | 18:52-GMT | Position: $226^{\circ} / 528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 29 | Quality: Poor Beaufort: 4 | Total 2-1 Calf at sighting |
|  | 15:41-PDT | Saw: Blow |
|  | 22:41-GMT | Position: 182 / 412 m Direction: West; Behavior: Speed slow - Traveling |
|  | Didn't see any indication of calf until "the stick" |  |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  |  |
| :---: | :---: | :---: |
|  | 10:34-PDT | Saw: Blow |
|  | 17:34-GMT | Position: 109 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:37-PDT | Saw: Blow |
|  | 17:37-GMT | Position: 109 / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:39-PDT | Saw: Blow |
|  | 17:39-GMT | Position: 109 / 1331 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:42-PDT | Saw: Body |
|  | 17:42-GMT | Position: $109^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:46-PDT | Saw: Blow |
|  | 17:46-GMT | Position: 118 / 946 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:49-PDT | Saw: Body |
|  | 17:49-GMT | Position: $121^{\circ}$ / 883 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | Calf poked r | $t$ of the water |
|  | 10:51-PDT | Saw: Blow |
|  | 17:51-GMT | Position: $131^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:53-PDT | Saw: Blow |
|  | 17:53-GMT | Position: $141^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 10:54-PDT | Saw: Blow |
|  | 17:54-GMT | Position: 147 / 550 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:56-PDT | Saw: Blow |
|  | 17:56-GMT | Position: $162^{\circ}$ / 471 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:57-PDT | Saw: Body |
|  | 17:57-GMT | Position: $181^{\circ}$ / 412 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:59-PDT | Saw: Blow |
|  | 17:59-GMT | Position: $209^{\circ} / 388 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Both surface | inside |
|  | 11:01-PDT | Saw: Blow |
|  | 18:01-GMT | Position: $226^{\circ}$ / 471 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:04-PDT | Saw: Blow Route past Holly: Inside |
|  | 18:04-GMT | Position: $251^{\circ} / 629 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 11 | Quality: Fair | Total 2-1 Calf at sighting |
|  | Beaufort: 1 |  |
| Images: 0818-57, 0861-65 | 11:36-PDT | Saw: Blow |
|  | 18:36-GMT | Position: 102 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | Slow at cam | and Isla Vista kelp, then faster. Mini-breach and rolling. |
|  | 11:40-PDT | Saw: Blow |
|  | 18:40-GMT | Position: 104 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:41-PDT | Saw: Body |
|  | 18:41-GMT | Position: $106^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 11:47-PDT | Saw: Blow |
|  | 18:47-GMT | Position: $110^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:50-PDT | Saw: Body |
|  | 18:50-GMT | Position: 111 / 1331 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:58-PDT | Saw: Body |
|  | 18:58-GMT | Position: $146^{\circ} / 508 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Sharking |
|  | 12:00-PDT | Saw: Body |
|  | 19:00-GMT | Position: $156^{\circ} / 356 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:01-PDT | Saw: Body |
|  | 19:01-GMT | Position: $178{ }^{\circ} / 356 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | With Tt \#14 |  |
|  | 12:03-PDT | Saw: Body |
|  | 19:03-GMT | Position: $210^{\circ} / 356 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  | 12:04-PDT | Saw: Body Route past Holly: Inside |
| :---: | :---: | :---: |
|  | 19:04-GMT | Position: $224^{\circ}$ / 356 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 13 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  | Beaufort: 1 |  |
|  | 11:46-PDT | Saw: Blow |
|  | 18:46-GMT | Position: $136^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow P Traveling $^{\text {a }}$ |
|  | 11:52-PDT | Saw: Blow |
|  | 18:52-GMT | Position: $149^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling $^{\text {a }}$ |
|  | 11:55-PDT | Saw: Blow |
|  | 18:55-GMT | Position: $160^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 12:00-PDT | Saw: Body Route past Holly: nd |
|  | 19:00-GMT | Position: 178 / 2260 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
| Sighting Number 17 <br> Images: 0867-0964 | Quality: Fair Beaufort: 1 | Total 2-1 Calf at sighting |
|  | 12:26-PDT | Saw: Body |
|  | 19:26-GMT | Position: 103 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | First saw calf's body in traveled along kelp acr After a while, they were | kelp off campus point. Lingered in kelp with mom for a while and slowly ross channel. Saw cow rolling. Calf stuck rostrum out of water more than once. e joined by a single Er (\#18). |
|  | 12:30-PDT | Saw: Body |
|  | 19:30-GMT | Position: $104^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling • Rolling |
|  | Rostrum out of water |  |
|  | 12:40-PDT | Saw: Blow |
|  | 19:40-GMT | Position: $106^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:45-PDT | Saw: Blow |
|  | 19:45-GMT | Position: $106^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow • Traveling • Rolling |
|  | 12:47-PDT | Saw: Blow |
|  | 19:47-GMT | Position: $106^{\circ}$ / 1208 m Direction: West; Behavior: Speed slow P Traveling $^{\text {a }}$ |
|  | 12:54-PDT | Saw: Blow |
|  | 19:54-GMT | Position: $116^{\circ}$ / 883 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:57-PDT | Saw: Body |
|  | 19:57-GMT | Position: $126^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:58-PDT | Saw: Body |
|  | 19:58-GMT | Position: 133 / 696 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:00-PDT | Saw: Body |
|  | 20:00-GMT | Position: 138 / 550 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:02-PDT | Saw: Body |
|  | 20:02-GMT | Position: 149 / 412 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:03-PDT | Saw: Body |
|  | 20:03-GMT | Position: $166^{\circ} / 356 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:05-PDT | Saw: Body |
|  | 20:05-GMT | Position: $180^{\circ} / 314 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:07-PDT | Saw: Body |
|  | 20:07-GMT | Position: 195 / 314 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:09-PDT | Saw: Body |
|  | 20:09-GMT | Position: $214^{\circ} / 314 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |
|  | Joined by Er \#18 |  |
|  | 13:11-PDT | Saw: Body |
|  | 20:11-GMT | Position: $237^{\circ}$ / 412 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:16-PDT | Saw: Body Route past Holly: Inside |
|  | 20:16-GMT | Position: $267^{\circ} / 574 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |


| Sighting Number 18 | Quality: Fair Beaufort: 1 | Total 1 - 0 Calves at sighting |
| :---: | :---: | :---: |
|  | 12:45-PDT | Saw: Blow |
|  | 19:45-GMT | Position: $110^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:50-PDT | Saw: Blow |
|  | 19:50-GMT | Position: $114^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:54-PDT | Saw: Blow |
|  | 19:54-GMT | Position: $122^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:58-PDT | Saw: Blow |
|  | 19:58-GMT | Position: $137^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:09-PDT | Saw: Blow Route past Holly: Inside |
|  | 20:09-GMT | Position: $214^{\circ} / 314 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | Joined Er \#17 |  |
| Sighting Number 29 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  | Beaufort: 3 |  |
|  | 15:15-PDT | Saw: Blow |
|  | 22:15-GMT | Position: 108 / 2749 m Direction: West; Behavior: Speed slow - Traveling |
|  | 15:19-PDT | Saw: Blow |
|  | 22:19-GMT | Position: $111^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:20-PDT | Saw: Blow |
|  | 22:20-GMT | Position: $112^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:21-PDT | Saw: Blow |
|  | 22:21-GMT | Position: $113^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:26-PDT | Saw: Blow |
|  | 22:26-GMT | Position: $121^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  | 15:32-PDT | Saw: Blow |
|  | 22:32-GMT | Position: $143^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:39-PDT | Saw: Blow |
|  | 22:39-GMT | Position: $204^{\circ}$ / 678 m Direction: West; Behavior: Speed slow - Traveling |
|  | 16:01-PDT | Saw: Blow Route past Holly: Inside |
|  | 23:01-GMT | Position: $241^{\circ}$ / 600 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 32 | Quality: Poor | Total 2-1 Calf at sighting |
|  | Beaufort: 4 |  |
| Images: 0990-91 | 16:39-PDT | Saw: Blow |
|  | 23:39-GMT | Position: 114 / 1674 m Direction: West; Behavior: Speed slow - Traveling |
|  | First spotted blows off Devereux. Calf followed behind mother. |  |
|  | 16:41-PDT | Saw: Blow |
|  | 23:41-GMT | Position: $116^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 16:42-PDT | Saw: Blow |
|  | 23:42-GMT | Position: $123^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 16:46-PDT | Saw: Blow |
|  | 23:46-GMT | Position: 144 / 696 m Direction: West; Behavior: Speed slow - Traveling |
|  | 16:50-PDT | Saw: Body |
|  | 23:50-GMT | Position: $176^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 16:54-PDT | Saw: Blow Route past Holly: Inside |
|  | 23:54-GMT | Position: $224^{\circ}$ / 600 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |


| Apr 14 | Day 64 of 107 | Gray whale (northbound) | Daily Totals | Whales 1 |
| :--- | :--- | :--- | :--- | :--- | Calves 09.



|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | 17:01-PDT | Saw: Blow |
|  |  | 0:01; 4/17/2014-GMT | Position: $179^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 17:05-PDT | Saw: Blow |
|  |  | 0:05; 4/17/2014-GMT | Position: 198 / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 17:11-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 0:11; 4/17/2014-GMT | Position: $230^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| Apr 17 | Day 67 of 107 | Gray whale (northbound) |  |
|  | Sighting Number 03 <br> Images: 1046-64 | Quality: Poor <br> Beaufort: 0 | Total 2-1 Calf at sighting |
|  |  | 09:03-PDT | Saw: Blow |
|  |  | 16:03-GMT | Position: $162^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | Calf Observation Ch traveled together un outside of kelp, whil west again. Images: | klist for sightings 3 and 4 . Total number of whales was 4 with 2 calves. Pairs they split apart in front of Counter Point. Leading pair traveled along the he trailing pair traveled inside the kelp and turned around before continuing 046-51 (lead)/ 52-64 (trail)? |
|  |  | 09:06-PDT | Saw: Blow |
|  |  | 16:06-GMT | Position: 189 / 600 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 09:10-PDT | Saw: Blow |
|  |  | 16:10-GMT | Position: $247^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 09:11-PDT | Saw: Blow |
|  |  | 16:11-GMT | Position: $256^{\circ}$ / 661 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 09:13-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 16:13-GMT | Position: $274^{\circ}$ / 778 m Direction: West; Behavior: Speed slow • Traveling |
|  | Sighting Number 04 | Quality: Poor Beaufort: 0 | Total 2-1 Calf at sighting |
|  |  | 09:06-PDT | Saw: Blow |
|  |  | 16:06-GMT | Position: 186 / 412 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | Turned around brief | in front of Counter Point before continuing west |
|  |  | 09:12-PDT | Saw: Blow |
|  |  | 16:12-GMT | Position: $245^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 09:13-PDT | Saw: Blow |
|  |  | 16:13-GMT | Position: $262^{\circ}$ / 600 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 09:14-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 16:14-GMT | Position: $269^{\circ}$ / 696 m Direction: West; Behavior: Speed slow • Traveling |
|  | Sighting Number 16 <br> Images: 1103-06 | Quality: Poor | Total 2-1 Calf at sighting |
|  |  | Beaufort: 1 |  |
|  |  | 12:41-PDT | Saw: Body |
|  |  | 19:41-GMT | Position: $140^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | First spotted off of Devereux. Slow moving, but not very slow. |  |
|  |  | 12:45-PDT | Saw: Blow |
|  |  | 19:45-GMT | Position: 179 / 629 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:49-PDT | Saw: Blow |
|  |  | 19:49-GMT | Position: $216^{\circ} / 574 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:53-PDT | Saw: Body |
|  |  | 19:53-GMT | Position: $254^{\circ}$ / 629 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 12:55-PDT | Saw: Blow |
|  |  | 19:55-GMT | Position: $268^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 12:58-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 19:58-GMT | Position: $281^{\circ}$ / 946 m Direction: West; Behavior: Speed slow - Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

| Sighting Number 19 | Quality: Poor <br> Beaufort: 1 | Total 4-2 Calves at sighting |
| :---: | :---: | :---: |
| Images: 1108-68 | First reported and followed by Condor Express. Stopped by campus point for an extended period of time. Calves were sandwiched between adults for most, if not all, of the time: <br> From campus point: Cow-calf-calf-Cow (off kelp) <br> In front of counter point: Cow-calf-Cow-calf <br> Along Sands: C/c pair leading C/c pair |  |
|  | 13:26-PDT | Saw: Body |
|  | 20:26-GMT | Position: $102^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:32-PDT | Saw: Blow |
|  | 20:32-GMT | Position: $104^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:38-PDT | Saw: Blow |
|  | 20:38-GMT | Position: $107^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:45-PDT | Saw: Blow |
|  | 20:45-GMT | Position: $109^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:56-PDT | Saw: Blow |
|  | 20:56-GMT | Position: 117 / 1331 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:02-PDT | Saw: Body |
|  | 21:02-GMT | Position: $127^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:07-PDT | Saw: Body |
|  | 21:07-GMT | Position: 154 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  | 14:08-PDT | Saw: Body |
|  | 21:08-GMT | Position: 159 / 574 m Direction: West; Behavior: Speed slow - Traveling |
|  | 14:09-PDT | Saw: Body |
|  | 21:09-GMT | Position: $167^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 14:11-PDT | Saw: Body |
|  | 21:11-GMT | Position: 178 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  | 14:15-PDT | Saw: Body |
|  | 21:15-GMT | Position: $212^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 14:20-PDT | Saw: Body Route past Holly: Inside |
|  | 21:20-GMT | Position: $254^{\circ}$ / 600 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 23 | Quality: Poor Beaufort: 1 | Total 2 - 1 Calf at sighting |
| Images: 1170-1214 | $\begin{aligned} & \hline \text { 14:49-PDT } \\ & \text { 21:49-GMT } \\ & \text { Went in kelp and } \end{aligned}$ | Saw: Body <br> Position: 120 / 1106 m Direction: West; Behavior: Speed slow • Traveling d around in front of Holly |
|  | 14:51-PDT | Saw: Body |
|  | 21:51-GMT | Position: $127^{\circ} / 1020 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:54-PDT | Saw: Body |
|  | 21:54-GMT | Position: $150^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:56-PDT | Saw: Body |
|  | 21:56-GMT | Position: $169^{\circ} / 574$ m Direction: West; Behavior: Speed slow - Traveling |
|  | 14:59-PDT | Saw: Body |
|  | 21:59-GMT | Position: $216^{\circ} / 528 \mathrm{~m}$ Direction: Circling; Behavior: Speed slow $\bullet$ Traveling |
|  | Possibly nursing |  |
|  | 15:02-PDT | Saw: Body |
|  | 22:02-GMT | Position: $242^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:05-PDT | Saw: Body |
|  | 22:05-GMT | Position: $249^{\circ} / 629 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 15:07-PDT | Saw: Body Route past Holly: Inside |
|  | 22:07-GMT | Position: $270^{\circ}$ / 735 m Direction: West; Behavior: Speed slow - Traveling |



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| Sighting Number 06 | Quality: Poor Beaufort: 1 | Total 4-0 Calves at sighting |
| :---: | :---: | :---: |
|  | 09:50-PDT | Saw: Blow |
|  | 16:50-GMT | Position: $122^{\circ} / 3528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 09:55-PDT | Saw: Blow |
|  | 16:55-GMT | Position: $129^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | 10:01-PDT | Saw: Body |
|  | 17:01-GMT | Position: 138 / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 10:07-PDT | Saw: Body |
|  | 17:07-GMT | Position: $158{ }^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |
|  | 10:14-PDT | Saw: Body |
|  | 17:14-GMT | Position: $186^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |
|  | 10:20-PDT | Saw: Body |
|  | 17:20-GMT | Position: $208^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow - Traveling $^{\text {a }}$ |
|  | 10:26-PDT | Saw: Body |
|  | 17:26-GMT | Position: $229^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | 10:31-PDT | Saw: Blow Route past Holly: Inside |
|  | 17:31-GMT | Position: $240^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow P Traveling $^{\text {a }}$ |
| Sighting Number 09 <br> Images: 1349-59 | Quality: Poor Beaufort: 1 | Total 2-1 Calf at sighting |
|  | 10:13-PDT | Saw: Body |
|  | 17:13-GMT | Position: $160^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | White spots on along kelp. | ridge. Emerged along the kelp in front of counter point and continued traveling |
|  | 10:14-PDT | Saw: Body |
|  | 17:14-GMT | Position: $167^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:15-PDT | Saw: Body |
|  | 17:15-GMT | Position: 177 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:19-PDT | Saw: Blow |
|  | 17:19-GMT | Position: $213^{\circ}$ / 508 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:21-PDT | Saw: Body |
|  | 17:21-GMT | Position: $248^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:23-PDT | Saw: Blow |
|  | 17:23-GMT | Position: $269^{\circ}$ / 827 m Direction: West; Behavior: Speed slow ${ }^{\text {e Traveling }}$ |
|  | 10:25-PDT | Saw: Blow Route past Holly: Inside |
|  | 17:25-GMT | Position: $269^{\circ}$ / 946 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 10 | Quality: Poor <br> Beaufort: 1 | Total 2 - 1 Calf at sighting |
| Images: 1362-1381 | $\begin{aligned} & \hline \text { 10:27-PDT } \\ & \text { 17:27-GMT } \\ & \text { Did not surfac } \end{aligned}$ | Saw: Blow <br> Position: $149^{\circ}$ / 696 m Direction: West; Behavior: Speed slow • Traveling ten. Calf surfaced more frequently than cow. Traveled along kelp. |
| Images: 1362-81 | 10:30-PDT | Saw: Body |
|  | 17:30-GMT | Position: 173 / 661 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:34-PDT | Saw: Body |
|  | 17:34-GMT | Position: $222^{\circ}$ / 574 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:35-PDT | Saw: Body Route past Holly: Inside |
|  | 17:35-GMT | Position: $233^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 16 | Quality: Poor Beaufort: 2 | Total 2 - 1 Calf at sighting |
| Images: 1386-90 | $\begin{aligned} & \text { 13:03-PDT } \\ & \text { 20:03-GMT } \\ & \text { First spotted t } \end{aligned}$ | Saw: Body <br> Position: $159^{\circ}$ / 778 m Direction: West; Behavior: Speed slow • Traveling of campus point. Long downtimes and short surface times. |
|  | 13:09-PDT | Saw: Body |
|  | 20:09-GMT | Position: $226^{\circ}$ / 696 m Direction: West; Behavior: Speed slow • Traveling |


|  | 13:10-PDT |  |
| :---: | :---: | :---: |
|  | 20:10-GMT | Position: $235{ }^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 19 | Quality: Poor | Total 2-1 Calf at sighting |
|  | Beaufort: 2 |  |
|  | 13:18-PDT | Saw: Blow |
|  | 20:18-GMT | Position: $169^{\circ}$ / 388 m Direction: West; Behavior: Speed slow - Traveling |
|  | First seen in front of counter point. Moved fast with short downtimes. |  |
|  | 13:19-PDT | Saw: Blow |
|  | 20:19-GMT | Position: 191 / 356 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:21-PDT | Saw: Body |
|  | 20:21-GMT | Position: $217^{\circ} / 356 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:25-PDT | Saw: Blow |
|  | 20:25-GMT | Position: $259^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:26-PDT | Saw: Body Route past Holly: Inside |
|  | 20:26-GMT | Position: $276^{\circ}$ / 735 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 23 | Quality: Poor | Total 6-3 Calves at sighting |
|  | Beaufort: 2 |  |
| Images: 1392-1505 | 14:47-PDT | Saw: Blow |
|  | 21:47-GMT | Position: 99 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | Very slow moving. Lots of rolling. One calf stuck its head out of the water, but not quite spyhopping. Traveled along the kelp together. very close together, making it difficult to determine the group size and impossible to distinguish individuals. |  |
|  | 14:49-PDT | Saw: Blow |
|  | 21:49-GMT | Position: 101 / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:53-PDT | Saw: Blow |
|  | 21:53-GMT | Position: 101 / 2749 m Direction: West; Behavior: Speed slow - Traveling |
|  | 14:57-PDT | Saw: Blow |
|  | 21:57-GMT | Position: $102^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 15:03-PDT | Saw: Blow |
|  | 22:03-GMT | Position: $105^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 15:10-PDT | Saw: Blow |
|  | 22:10-GMT | Position: $106^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 15:14-PDT | Saw: Blow |
|  | 22:14-GMT | Position: $109^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:18-PDT | Saw: Blow |
|  | 22:18-GMT | Position: 109 / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  | 15:23-PDT | Saw: Blow |
|  | 22:23-GMT | Position: 108 / 1674 m Direction: West; Behavior: Speed slow - Traveling |
|  | 15:28-PDT | Saw: Blow |
|  | 22:28-GMT | Position: $109^{\circ} / 1208 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 15:31-PDT | Saw: Blow |
|  | 22:31-GMT | Position: $113^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 15:34-PDT | Saw: Blow |
|  | 22:34-GMT | Position: 117 / 1020 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:36-PDT | Saw: Blow |
|  | 22:36-GMT | Position: $117^{\circ} / 946 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 15:38-PDT | Saw: Body |
|  | 22:38-GMT | Position: $118^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 15:40-PDT | Saw: Body |
|  | 22:40-GMT | Position: $122^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 15:45-PDT | Saw: Body |
|  | 22:45-GMT | Position: $134^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |

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|  |  | 15:49-PDT | Saw: Body |
| :---: | :---: | :---: | :---: |
|  |  | 22:49-GMT | Position: $146^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 15:52-PDT | Saw: Body |
|  |  | 22:52-GMT | Position: 158 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 15:33-PDT | Saw: Blow |
|  |  | 22:33-GMT | Position: $164^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 15:56-PDT | Saw: Blow |
|  |  | 22:56-GMT | Position: $176^{\circ} / 574$ m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 15:57-PDT | Saw: Body |
|  |  | 22:57-GMT | Position: $185^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:01-PDT | Saw: Body |
|  |  | 23:01-GMT | Position: $206^{\circ}$ / 508 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:03-PDT | Saw: Blow |
|  |  | 23:03-GMT | Position: $217^{\circ}$ / 508 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | Circling around | Ph kelp |
|  |  | 16:05-PDT | Saw: Blow |
|  |  | 23:05-GMT | Position: $213^{\circ}$ / 440 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:09-PDT | Saw: Blow |
|  |  | 23:09-GMT | Position: $242^{\circ}$ / 528 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:10-PDT | Saw: Body |
|  |  | 23:10-GMT | Position: $250^{\circ} / 574 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:15-PDT | Saw: Body Route past Holly: Inside |
|  |  | 23:15-GMT | Position: $274{ }^{\circ} / 696$ m Direction: West; Behavior: Speed slow • Traveling |
| Apr 19 | Day 69 of 107 | Gray whale (n | nd) Daily Totals Whales 19 Calves 9 |
|  | Sighting Number 05 | Quality: Good Beaufort: 2 | Total 2 - 1 Calf at sighting |
|  | Images: 1536-37 | 12:08-PDT | Saw: Body |
|  |  | 19:08-GMT | Position: $137^{\circ}$ / 1020 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | Appeared after but were not | ux. Traveled relatively quickly and rarely surfaced. Mom had unique markings, on camera. |
|  |  | 12:10-PDT | Saw: Body |
|  |  | 19:10-GMT | Position: 178 / 696 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 12:19-PDT | Saw: Body Route past Holly: Inside |
|  |  | 19:19-GMT | Position: $247^{\circ} / 1106$ m Direction: West; Behavior: Speed slow • Traveling |
|  | Sighting Number 08 | Quality: Good | Total 6-3 Calves at sighting |
|  |  | Beaufort: 2 |  |
|  | Images: 1545-1701 | 12:44-PDT | Saw: Blow |
|  |  | 19:44-GMT | Position: $99^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | First spotted breached and down Sands. | us point. Two pairs together, one pair was slightly separated. At least one calf ped. Shadowed by a boat off Devereux. Stayed close to shore all of the way |
|  |  | 12:46-PDT | Saw: Blow |
|  |  | 19:46-GMT | Position: 101 / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 12:50-PDT | Saw: Blow |
|  |  | 19:50-GMT | Position: 102 / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 12:55-PDT | Saw: Blow |
|  |  | 19:55-GMT | Position: $104^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 12:56-PDT | Saw: Blow |
|  |  | 19:56-GMT | Position: $108^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 13:01-PDT | Saw: Body |
|  |  | 20:01-GMT | Position: $108^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 13:02-PDT | Saw: Blow |
|  |  | 20:02-GMT | Position: $109^{\circ} / 1922$ m Direction: West; Behavior: Speed slow - Traveling |

## 2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  |  |
| :---: | :---: | :---: |
|  | 13:05-PDT | Saw: Blow |
|  | 20:05-GMT | Position: $109^{\circ} / 1674$ m Direction: West; Behavior: Speed slow - Traveling • Spyhop |
|  | Awkward look | hop |
|  | 13:07-PDT | Saw: Blow |
|  | 20:07-GMT | Position: 110 / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:09-PDT | Saw: Body |
|  | 20:09-GMT | Position: $111^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling • Fluke - |
|  | 13:10-PDT | Saw: Blow |
|  | 20:10-GMT | Position: $113^{\circ} / 1020 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling • Breach |
|  | 13:13-PDT | Saw: Blow |
|  | 20:13-GMT | Position: $117^{\circ} / 1020 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling • Breach • |
|  | 13:14-PDT | Saw: Blow |
|  | 20:14-GMT | Position: $121^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:15-PDT | Saw: Blow |
|  | 20:15-GMT | Position: $134^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:17-PDT | Saw: Body |
|  | 20:17-GMT | Position: $146^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | Poked head out |  |
|  | 13:19-PDT | Saw: Blow |
|  | 20:19-GMT | Position: $167^{\circ} / 440 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:21-PDT | Saw: Blow |
|  | 20:21-GMT | Position: $186^{\circ} / 528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:24-PDT | Saw: Blow |
|  | 20:24-GMT | Position: $227^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:27-PDT | Saw: Blow |
|  | 20:27-GMT | Position: $264^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:32-PDT | Saw: Blow Route past Holly: Inside |
|  | 20:32-GMT | Position: $291^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 10 | Quality: Good Beaufort: 2 | Total 2-1 Calf at sighting |
| Images: 1703-1732 | 13:13-PDT | Saw: Blow |
|  | 20:13-GMT | Position: 103 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | First spotted o | s point. Did not move very slowly. Ventured into kelp in front of Holly. |
|  | 13:15-PDT | Saw: Body |
|  | 20:15-GMT | Position: 103 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:18-PDT | Saw: Blow |
|  | 20:18-GMT | Position: $106^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:22-PDT | Saw: Blow |
|  | 20:22-GMT | Position: $119^{\circ} / 827 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:28-PDT | Saw: Body |
|  | 20:28-GMT | Position: $155^{\circ} / 388 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:29-PDT | Saw: Body |
|  | 20:29-GMT | Position: 173 / 356 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:30-PDT | Saw: Body |
|  | 20:30-GMT | Position: 188 / 366 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:31-PDT | Saw: Body |
|  | 20:31-GMT | Position: $216^{\circ} / 388 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:33-PDT | Saw: Body |
|  | 20:33-GMT | Position: $258^{\circ} / 400 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:35-PDT | Saw: Blow Route past Holly: Inside |
|  | 20:35-GMT | Position: $252^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

| Sighting Number 12 | Quality: Good Beaufort: 2 | Total 1 - 0 Calves at sighting |
| :---: | :---: | :---: |
|  | $\begin{aligned} & \text { 13:53-PDT } \\ & \text { 20:53-GMT } \\ & \text { One sighting } \end{aligned}$ | Saw: Body <br> Position: $226^{\circ}$ / 489 m Direction: West; Behavior: Speed slow • Traveling nds. Very quick. |
| Sighting Number 13 | Quality: Good Beaufort: 2 | Total 4-2 Calves at sighting |
| Images: 1734-1816 | 14:05-PDT <br> 21:05-GMT <br> First seen off can crossed Dever Images for lea Images for tra | Saw: Body <br>  <br> point kelp finger. Some separation between pairs. The gap widened as the pairs lead pair doubled back in front of Holly and rejoined trailing pair. $\begin{aligned} & \text { ir: 1734-1768. } \\ & \text { ir: 1770-1816. } \end{aligned}$ |
|  | 14:07-PDT | Saw: Body |
|  | 21:07-GMT | Position: $106^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:11-PDT | Saw: Blow |
|  | 21:11-GMT | Position: $105^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:15-PDT | Saw: Blow |
|  | 21:15-GMT | Position: $107^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:19-PDT | Saw: Blow |
|  | 21:19-GMT | Position: $110^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:23-PDT | Saw: Body |
|  | 21:23-GMT | Position: $116^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:25-PDT | Saw: Body |
|  | 21:25-GMT | Position: 118 / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 14:26-PDT | Saw: Body |
|  | 21:26-GMT | Position: $123^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:28-PDT | Saw: Body |
|  | 21:28-GMT | Position: $133^{\circ} / 678 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:31-PDT | Saw: Body |
|  | 21:31-GMT | Position: $141^{\circ}$ / 489 m Direction: West; Behavior: Speed slow - Traveling |
|  | 14:33-PDT | Saw: Body |
|  | 21:33-GMT | Position: $169^{\circ}$ / 388 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:35-PDT | Saw: Body |
|  | 21:35-GMT | Position: $206^{\circ} / 388 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:36-PDT | Saw: Body |
|  | 21:36-GMT | Position: $220^{\circ} / 412 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 14:42-PDT | Saw: Blow |
|  | 21:42-GMT | Position: $226^{\circ}$ / 508 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:44-PDT | Saw: Blow |
|  | 21:44-GMT | Position: $246^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:47-PDT | Saw: Blow Route past Holly: Inside |
|  | 21:47-GMT | Position: $272^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 16 | Quality: Good Beaufort: 2 | Total 2-1 Calf at sighting |
| Images: 1818-47 | $\begin{aligned} & \text { 15:46-PDT } \\ & \text { 22:46-GMT } \\ & \text { Traveled slowl } \end{aligned}$ | Saw: Body <br> Position: $118^{\circ}$ / 778 m Direction: West; Behavior: Speed slow • Traveling <br> long downtime after passing counter point until they reached "the stick" |
|  | 15:49-PDT | Saw: Blow |
|  | 22:49-GMT | Position: $124^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 15:52-PDT | Saw: Blow |
|  | 22:52-GMT | Position: 137 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  | 15:55-PDT | Saw: Blow |
|  | 22:55-GMT | Position: $159^{\circ} / 388 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |



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| Sighting Number 09 | Quality: Poor Beaufort: 1 | Total 2 - 1 Calf at sighting |
| :---: | :---: | :---: |
| Images: 1949-2046 | $\begin{aligned} & \hline \text { 10:56-PDT } \\ & \text { 17:56-GMT } \end{aligned}$ <br> Mother and calf cut th traveled through Deve point, then between k counter point. A group | Saw: Blow <br> Position: $101^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow • Traveling <br> rough kelp down from campus point, inside IV kelp in very shallow water. Then reux surf (not much surf and no surfers) across and through kelp at counter lp and surf at sands. They were joined by a pod of Bottlenose dolphins past of kayakers got in their path, which resulted in a long downtime. |
|  | $\begin{aligned} & \text { 10:56-PDT } \\ & \text { 17:56-GMT } \end{aligned}$ | Saw: Blow <br> Position: 103 / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | $\begin{aligned} & \text { 10:59-PDT } \\ & \text { 17:59-GMT } \end{aligned}$ | Saw: Body <br> Position: $103^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  | $\begin{aligned} & \text { 11:01-PDT } \\ & \text { 18:01-GMT } \end{aligned}$ | Saw: Blow <br> Position: $103^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow • Traveling |
|  | $\begin{aligned} & \hline \text { 11:09-PDT } \\ & \text { 18:09-GMT } \end{aligned}$ | Saw: Body <br> Position: $104^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | $\begin{aligned} & \hline \text { 11:10-PDT } \\ & \text { 18:10-GMT } \\ & \text { In kelp } \end{aligned}$ | Saw: Body <br> Position: $109^{\circ}$ / 489 m Direction: West; Behavior: Speed slow • Traveling |
|  | $\begin{aligned} & \text { 11:11-PDT } \\ & \text { 18:11-GMT } \\ & \text { In kelp } \end{aligned}$ | Saw: Body <br> Position: $122^{\circ}$ / 366 m Direction: West; Behavior: Speed slow • Traveling |
|  | $\begin{aligned} & \hline \text { 11:13-PDT } \\ & \text { 18:13-GMT } \end{aligned}$ <br> With dolphins in kelp | Saw: Body <br> Position: $133^{\circ} / 366$ m Direction: West; Behavior: Speed slow • Traveling |
|  | $\begin{aligned} & \text { 11:14-PDT } \\ & \text { 18:14-GMT } \\ & \text { In kelp with dolphins } \end{aligned}$ | Saw: Body <br> Position: $167^{\circ} / 287$ m Direction: West; Behavior: Speed slow • Traveling |
|  | $\begin{aligned} & \text { 11:16-PDT } \\ & \text { 18:16-GMT } \\ & \text { In kelp } \end{aligned}$ | Saw: Body <br> Position: $239^{\circ}$ / 300 m Direction: West; Behavior: Speed slow • Traveling |
|  | $\begin{aligned} & \hline \text { 11:18-PDT } \\ & \text { 18:18-GMT } \\ & \text { In kelp } \end{aligned}$ | Saw: Body <br> Position: $244^{\circ}$ / 275 m Direction: West; Behavior: Speed slow • Traveling |
|  | $\begin{aligned} & \text { 11:20-PDT } \\ & \text { 18:20-GMT } \\ & \text { In kelp } \end{aligned}$ | Saw: Body <br> Position: $267^{\circ}$ / 412 m Direction: West; Behavior: Speed slow • Traveling |
|  | $\begin{aligned} & \text { 11:23-PDT } \\ & \text { 18:23-GMT } \end{aligned}$ |  |
| Sighting Number 11 | Quality: Poor <br> Beaufort: 1 | Total 2 - 1 Calf at sighting |
| Images: 1934-45, 2048-52 | $\begin{aligned} & \hline \text { 11:03-PDT } \\ & \text { 18:03-GMT } \end{aligned}$ <br> Not very showy. First s point for an extended | CueTip: Passerby / Saw: Body <br> Position: $139^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling <br> een off of Devereux side of counter point. Very slow. Stopped in front of counter period of time-possibly nursing. |


| 11:06-PDT | Saw: Body |
| :--- | :--- |
| 18:06-GMT <br> Possibly nursing | Position: $147^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| 11:11-PDT | Saw: Body |
| 18:11-GMT | Position: $156^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| 11:13-PDT | Saw: Body |
| 18:13-GMT | Position: $154^{\circ} / 600 \mathrm{~m}$ Direction: Circling; Behavior: Speed slow |
| Possibly nursing |  |
| 11:17-PDT | Saw: Body |
| 18:17-GMT | Position: $165^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |

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2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  | 13:24-PDT | Saw: Blow |
| :---: | :---: | :---: |
|  | 20:24-GMT | Position: $116^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:26-PDT | Saw: Blow |
|  | 20:26-GMT | Position: 120 / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:27-PDT | Saw: Blow |
|  | 20:27-GMT | Position: $123^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:31-PDT | Saw: Blow |
|  | 20:31-GMT | Position: $137^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:32-PDT | Saw: Blow |
|  | 20:32-GMT | Position: $145^{\circ}$ / 883 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
|  | 13:35-PDT | Saw: Body |
|  | 20:35-GMT | Position: $168^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:36-PDT | Saw: Blow |
|  | 20:36-GMT | Position: $177^{\circ}$ / 678 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:37-PDT | Saw: Body |
|  | 20:37-GMT | Position: $187^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:38-PDT | Saw: Body |
|  | 20:38-GMT | Position: 196 / 629 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:40-PDT | Saw: Body |
|  | 20:40-GMT | Position: $221^{\circ} / 661 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 13:42-PDT | Saw: Blow |
|  | 20:42-GMT | Position: $232^{\circ} / 629 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling $\bullet$ Fluke $^{\text {a }}$ |
|  | 13:43-PDT | Saw: Blow |
|  | 20:43-GMT | Position: $246^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:45-PDT | Saw: Blow |
|  | 20:45-GMT | Position: $256^{\circ}$ / 778 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:47-PDT | Saw: Body |
|  | 20:47-GMT | Position: $271^{\circ} / 946 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:48-PDT | Saw: Body Route past Holly: Inside |
|  | 20:48-GMT | Position: $276^{\circ}$ / 946 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 07 | Quality: Poor <br> Beaufort: 4 | Total 6 - 3 Calves at sighting |
| Images: 2138-2238 | 13:16-PDT | Saw: Blow |
|  | 20:16-GMT | Position: $105^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | Images com of the pairs tr | Er sighting \#6. Pairs first spotted off of campus point, not far behind Er \#6. One htly behind the other two pairs. |
|  | 13:18-PDT | Saw: Blow |
|  | 20:18-GMT | Position: 107 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:21-PDT | Saw: Blow |
|  | 20:21-GMT | Position: 109 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:23-PDT | Saw: Blow |
|  | 20:23-GMT | Position: 111 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:26-PDT | Saw: Blow |
|  | 20:26-GMT | Position: 111 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:27-PDT | Saw: Blow |
|  | 20:27-GMT | Position: 111 / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:29-PDT | Saw: Blow |
|  | 20:29-GMT | Position: $112^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:31-PDT | Saw: Blow |
|  | 19:31-GMT | Position: 116 / 1331 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:33-PDT | Saw: Body |
|  | 19:33-GMT | Position: $116^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |





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|  |  |  |
| :---: | :---: | :---: |
|  | 12:40-PDT | Saw: Blow |
|  | 19:40-GMT | Position: $218^{\circ} / 528 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:45-PDT | Saw: Blow |
|  | 19:45-GMT | Position: $236^{\circ} / 528 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:47-PDT | Saw: Blow |
|  | 19:47-GMT | Position: $246^{\circ} / 528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:49-PDT | Saw: Blow |
|  | 19:49-GMT | Position: $257^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:51-PDT | Saw: Blow Route past Holly: Inside |
|  | 19:51-GMT | Position: $265^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 19 | Quality: Good | Total 2-1 Calf at sighting |
|  | Beaufort: 4 |  |
| Images: 2544-2606 | 12:48-PDT | Saw: Blow |
|  | 19:48-GMT | Position: 111 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | First seen off | point. Very slow. Short surface times. Stopped in front of Holly for a while. |
|  | 12:50-PDT | Saw: Blow |
|  | 19:50-GMT | Position: $111^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:52-PDT | Saw: Blow |
|  | 19:52-GMT | Position: $109^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:55-PDT | Saw: Blow |
|  | 19:55-GMT | Position: $108^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:03-PDT | Saw: Blow |
|  | 20:03-GMT | Position: $119^{\circ} / 827 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:04-PDT | Saw: Blow |
|  | 20:04-GMT | Position: 124 / 778 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:08-PDT | Saw: Blow |
|  | 20:08-GMT | Position: $149^{\circ} / 629 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:10-PDT | Saw: Body |
|  | 20:10-GMT | Position: $164^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:12-PDT | Saw: Blow |
|  | 20:12-GMT | Position: $175^{\circ} / 574 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:13-PDT | Saw: Blow |
|  | 20:13-GMT | Position: 182 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:14-PDT | Saw: Body |
|  | 20:14-GMT | Position: 193 / 600 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:16-PDT | Saw: Body |
|  | 20:16-GMT | Position: 199 / 489 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:18-PDT | Saw: Body |
|  | 20:18-GMT | Position: $216^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:28-PDT | Saw: Body |
|  | 20:28-GMT | Position: $242^{\circ} / 471 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:30-PDT | Saw: Body Route past Holly: Inside |
|  | 20:30-GMT | Position: $259^{\circ}$ / 455 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 23 | Quality: Poor <br> Beaufort: 4 | Total 2 - 1 Calf at sighting |
| Images: 2643-82 | 15:14-PDT | Saw: Blow |
|  | 22:14-GMT | Position: $104^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | First spotted approached | pus point. Long downtime with little movement. Moved inside kelp as they oint and continued traveling inside kelp. |
|  | 15:19-PDT | Saw: Blow |
|  | 22:19-GMT | Position: $106^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 15:20-PDT | Saw: Body |
|  | 22:20-GMT | Position: $108^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow ${ }^{\text {e Traveling }}$ |


|  |  |  |
| :---: | :---: | :---: |
|  | 15:23-PDT | Saw: Blow |
|  | 22:23-GMT | Position: $108^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:26-PDT | Saw: Blow |
|  | 22:26-GMT | Position: $111^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 15:31-PDT | Saw: Blow |
|  | 22:31-GMT | Position: 112 / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:35-PDT | Saw: Blow |
|  | 22:35-GMT | Position: $120^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:39-PDT | Saw: Blow |
|  | 22:39-GMT | Position: $134^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:41-PDT | Saw: |
|  | 22:41-GMT | Position: $156^{\circ} / 388 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:43-PDT | Saw: Body |
|  | 22:43-GMT | Position: 177 / 347 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:43-PDT | Saw: Body |
|  | 22:43-GMT | Position: 177 / 347 m Direction: West; Behavior: Speed slow - Traveling |
|  | 15:44-PDT | Saw: Body |
|  | 22:44-GMT | Position: 188 / 314 m Direction: West; Behavior: Speed slow - Traveling |
|  | 15:46-PDT | Saw: Body |
|  | 22:46-GMT | Position: $212^{\circ} / 322 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:55-PDT | Saw: Blow Route past Holly: Inside |
|  | 22:55-GMT | Position: $279^{\circ}$ / 778 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 24 | Quality: Poor | Total 2-1 Calf at sighting |
|  | Beaufort: 4 |  |
| Images: 2690-99 | 15:34-PDT | Saw: Blow |
|  | 22:34-GMT | Position: $106^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Traveled farther out | an typical C/c pairs. Short surface times with long downtimes. |
|  | 15:49-PDT | Saw: Blow |
|  | 22:49-GMT | Position: 129 / 946 m Direction: West; Behavior: Speed slow - Traveling |
|  | 15:53-PDT | Saw: Body |
|  | 22:53-GMT | Position: $148^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:55-PDT | Saw: Body |
|  | 22:55-GMT | Position: $171^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 15:56-PDT | Saw: Blow |
|  | 22:56-GMT | Position: $177^{\circ} / 314 \mathrm{~m}$ Direction: West; Behavior: Speed slow |
|  | 16:01-PDT | Saw: Blow |
|  | 23:01-GMT | Position: $232^{\circ} / 661 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 16:02-PDT | Saw: Blow |
|  | 23:02-GMT | Position: $236^{\circ}$ / 661 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 16:07-PDT | Saw: Blow Route past Holly: Inside |
|  | 23:07-GMT | Position: $272^{\circ}$ / 883 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 26 | Quality: Fair <br> Beaufort: 3 | Total 1 - 0 Calves at sighting |
|  | 16:42-PDT | CueTip: - / Saw: Blow |
|  | 23:42-GMT | Position: 97 / 2260 m Direction: West; Behavior: Speed slow - Traveling |
|  | 16:46-PDT | Saw: Blow |
|  | 23:46-GMT | Position: $103^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 16:51-PDT | Saw: Blow |
|  | 23:51-GMT | Position: $108^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 16:54-PDT | Saw: Blow |
|  | 23:54-GMT | Position: 112 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 17:01-PDT | Saw: Blow |
|  | 0:01; 4/23/2014-GMT | Position: $122^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |

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| Sighting Number 20 | Quality: Fair Beaufort: 4 | Total 2 - 1 Calf at sighting |
| :---: | :---: | :---: |
| Images: 2895-2903 | $\begin{aligned} & \text { 14:35-PDT } \\ & \text { 21:35-GMT } \end{aligned}$ <br> Saw pair off water several | Saw: Blow <br> Position: 111 / 1331 m Direction: West; Behavior: Speed slow • Traveling oint- not seen again until in front of counter point. Calf poked its head out of the he pair disappeared after that. |
|  | $\begin{aligned} & \text { 14:44-PDT } \\ & \text { 21:44-GMT } \end{aligned}$ | Saw: Body Route past Holly: Inside <br> Position: $145^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling • Rolling  |
| Sighting Number 24 <br> Images: 2918-3110 | Quality: Fair Beaufort: 3 | Total $10-5$ Calves at sighting |
|  | 15:35-PDT <br> 22:35-GMT <br> Multiple blo rolling, spyh amazing sh | Saw: Blow <br> Position: $102^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling een off campus point. Traveled very slowly along kelp. Saw calves frequently ini-breach across the point. The five pairs stayed together: 2-2-1. They put on an veled close to shore as they went by Sands. The best! |
|  | 15:38-PDT | Saw: Blow |
|  | 22:38-GMT | Position: $104^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |
|  | 15:41-PDT | Saw: Blow |
|  | 22:41-GMT | Position: $106^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 15:51-PDT | Saw: Blow |
|  | 22:51-GMT | Position: $107^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:58-PDT | Saw: Blow |
|  | 22:58-GMT | Position: $111^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Slightly separated groups |  |
|  | 16:07-PDT | Saw: Blow |
|  | 23:07-GMT | Position: $110^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 16:12-PDT | Saw: Body |
|  | 23:12-GMT | Position: 112 / 1331 m Direction: West; Behavior: Speed slow • Traveling • Spyhop • |
|  | 16:29-PDT | Saw: Blow |
|  | 23:29-GMT | Position: $115^{\circ} / 883 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Breach |
|  | 16:22-PDT | Saw: Body |
|  | 23:22-GMT | Position: 119 / 827 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Breach |
|  | 16:25-PDT | Saw: Body |
|  | 23:25-GMT | Position: $128^{\circ}$ / 600 m Direction: West; Behavior: Speed slow - Traveling • Breach |
|  | 16:28-PDT | Saw: Blow |
|  | 23:28-GMT | Position: $141^{\circ} / 574 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 16:30-PDT | Saw: Body |
|  | 23:30-GMT | Position: $154^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 16:32-PDT | Saw: Body |
|  | 23:32-GMT | Position: 174 / 412 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Breach |
|  | 16:33-PDT | Saw: Body |
|  | 23:33-GMT | Position: $187^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Breach |
|  | 16:37-PDT | Saw: Body |
|  | 23:37-GMT | Position: 220 / 412 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Spyhop |
|  | 16:40-PDT | Saw: Body |
|  | 23:40-GMT | Position: $234^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Rolling |
|  | 16:42-PDT | Saw: Body |
|  | 23:42-GMT | Position: $252^{\circ} / 508 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |
|  | 16:45-PDT | Saw: Body |
|  | 23:45-GMT | Position: $267^{\circ}$ / 600 m Direction: West; Behavior: Speed slow • Traveling |
|  | 16:46-PDT | Saw: Body |
|  | 23:46-GMT | Position: $274^{\circ}$ / 629 m Direction: West; Behavior: Speed slow - Traveling |
|  | 16:48-PDT | Saw: Blow Route past Holly: Inside |
|  | 23:48-GMT | Position: $279^{\circ}$ / 735 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |


| Apr 24 | Day 74 of 107 | Gray whale (northbound) |  | Calves 8 |
| :---: | :---: | :---: | :---: | :---: |
|  | Sighting Number 04 | Quality: Good Beaufort: 2 | Total 2-1 Calf at sighting |  |
|  | Images: 3112-24 | 09:16-PDT | Saw: Blow |  |
|  |  | 16:16-GMT | Position: 108 / 2260 m Direction: West; Behavior: Speed slow • Traveling |  |
|  |  | Pair was spotted off campus point. Did not surface very often. At one point, calf was in front of cow. |  |  |
|  |  | 09:26-PDT | Saw: Blow |  |
|  |  | 16:26-GMT | Position: 114 / 1331 m Direction: West; Behavior: Speed slow • Traveling |  |
|  |  | 09:34-PDT | Saw: Blow |  |
|  |  | 16:34-GMT | Position: 138 / 629 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |  |
|  |  | 09:37-PDT | Saw: Blow <br> Position: $152^{\circ}$ / 508 m Direction: West; Behavior: Speed slow • Traveling |  |
|  |  | 16:37-GMT |  |  |
|  |  | 09:41-PDT | Saw: BodyPosition: $170^{\circ} / 412 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |  |
|  |  | 16:41-GMT |  |  |
|  |  | 09:43-PDT | Saw: Body |  |
|  |  | 16:43-GMT | Position: 196 / 400 m Direction: West; Behavior: Speed slow - Traveling |  |
|  |  | 09:46-PDT | Saw: Body |  |
|  |  | 16:46-GMT | Position: $231^{\circ}$ / 400 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |  |
|  |  | 09:54-PDT | Saw: Body Route past Holly: Inside |  |
|  |  | 16:54-GMT | Position: $276^{\circ}$ / 574 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |  |
|  | Sighting Number 07 | Quality: Good | Total 1 - 0 Calves at sighting |  |
|  |  | Beaufort: 2 |  |  |
|  |  | 10:08-PDT | Saw: Blow |  |
|  |  | 17:08-GMT | Position: 109 / 2749 m Direction: West; Behavior: Speed slow • Traveling |  |
|  |  | 10:13-PDT |  |  |
|  |  | 17:13-GMT | Position: 112 ${ }^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |  |
|  |  | 10:19-PDT | Saw: Blow <br> Position: $121^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |  |
|  |  | 17:19-GMT |  |  |
|  |  | 10:23-PDT |  |  |
|  |  | 17:23-GMT | Position: $136^{\circ} / 827$ m Direction: West; Behavior: Speed slow $\bullet$ Traveling |  |
|  |  | 10:27-PDT | Saw: Body |  |
|  |  | 17:27-GMT | Position: $189^{\circ} / 508 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |  |
|  |  | 10:29-PDT | Saw: Body |  |
|  |  | 17:29-GMT | Position: $207^{\circ} / 528 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |  |
|  |  | 10:30-PDT | Saw: Blow <br> Position: $222^{\circ}$ / 574 m Direction: West; Behavior: Speed slow • Traveling |  |
|  |  | 17:30-GMT |  |  |
|  |  | 10:33-PDT | Saw: Blow Route past Holly: Inside |  |
|  |  | 17:33-GMT | Position: $256^{\circ} / 883 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |  |
|  | Sighting Number 10 | Quality: Good Beaufort: 2 | Total 4-2 Calves at sighting |  |
|  | Images: 3131-3246 | 10:37-PDT | Saw: Blow |  |
|  |  | 17:37-GMT | Position: 107 / 2749 m Direction: West; Behavior: Speed slow • Traveling |  |
|  |  | Many blows spotted off campus point. Both calves breached simultaneously! Lead calf breached more than 10 times! Pairs were separated by a few degrees occasionally, but came back together after passing Holly |  |  |
|  |  | 10:40-PDT | Saw: Blow |  |
|  |  | 17:40-GMT | Position: 108 / 2260 m Direction: West; Behavior: Speed slow P Traveling • Fluke $^{\circ}$ |  |
|  |  | Calffluke |  |  |
|  |  | 10:44-PDT | Saw: Blow |  |
|  |  | 17:44-GMT | Position: $110^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Rolling |  |
|  |  | 10:49-PDT | Saw: Blow |  |
|  |  | 17:49-GMT | Position: $113^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Breach |  |
|  |  | Approximately 3 degrees apart from trailing pair |  |  |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  |  |
| :---: | :---: | :---: |
|  | 10:51-PDT | Saw: Body |
|  | 17:51-GMT | Position: 115 / 1331 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |
|  | 10:57-PDT | Saw: Body |
|  | 17:57-GMT | Position: $121^{\circ} / 1020 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Breach • Rolling |
|  |  | Saw: Body |
|  | 17:59-GMT | Position: $121^{\circ}$ / 827 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |
|  | Both pairs ba |  |
|  | 11:02-PDT | Saw: Body |
|  | 18:02-GMT | Position: $131^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:03-PDT | Saw: Blow |
|  | 18:03-GMT | Position: $138^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:05-PDT | Saw: Blow |
|  | 18:05-GMT | Position: $145^{\circ} / 455 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:07-PDT | Saw: Blow |
|  | 18:07-GMT | Position: $156^{\circ}$ / 455 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:08-PDT | Saw: Blow |
|  | 18:08-GMT | Position: $168^{\circ}$ / 412 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:10-PDT | Saw: Blow |
|  | 18:10-GMT | Position: 190 / 412 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:13-PDT | Saw: Blow |
|  | 18:13-GMT | Position: $211^{\circ} / 412 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:15-PDT | Saw: Blow |
|  | 18:15-GMT | Position: $224^{\circ}$ / 455 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:17-PDT | Saw: Blow |
|  | 18:17-GMT | Position: $236^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:18-PDT | Saw: Blow |
|  | 18:18-GMT | Position: $256^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:21-PDT | Saw: Blow |
|  | 18:21-GMT | Position: $267^{\circ}$ / 778 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Spyhop |
|  | 11:22-PDT | Saw: Blow Route past Holly: Inside |
|  | 18:22-GMT | Position: $275^{\circ} / 629 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 12 | Quality: Good Beaufort: 2 | Total 2-1 Calf at sighting |
| Images: 3248-3293 | 10:53-PDT | Saw: Blow |
|  | 17:53-GMT | Position: 102 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | Slow traveling very close- alm | irst spotted off campus point. Traveled inside kelp in front of counter point. Came urf zone. |
|  | 11:01-PDT | Saw: Blow |
|  | 18:01-GMT | Position: $106^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 11:16-PDT | Saw: Blow |
|  | 18:16-GMT | Position: 111 / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:24-PDT | Saw: Blow |
|  | 18:24-GMT | Position: $124^{\circ}$ / 883 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:27-PDT | Saw: Blow |
|  | 18:27-GMT | Position: $130^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:30-PDT | Saw: Body |
|  | 18:30-GMT | Position: $141^{\circ} / 574 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:34-PDT | Saw: Body |
|  | 18:34-GMT | Position: $159^{\circ} / 338 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | Very close! |  |
|  | 11:35-PDT | Saw: Blow |
|  | 18:35-GMT | Position: 184 / 300 m Direction: West; Behavior: Speed slow - Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  |  |
| :---: | :---: | :---: |
|  | 11:38-PDT | Saw: Body |
|  | 18:38-GMT | Position: $218^{\circ} / 356 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:42-PDT | Saw: Body |
|  | 18:42-GMT | Position: $246^{\circ} / 471$ m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:44-PDT | Saw: Body Route past Holly: Inside |
|  | 18:44-GMT | Position: 254 / 661 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 17 | Quality: Good Beaufort: 2 | Total 4-2 Calves at sighting |
| Images: 3296-3439 | 13:13-PDT | Saw: Blow |
|  | 20:13-GMT | Position: 108 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | One of the calves had a distinguishing spot on its back. That same calf breached at least 20 times. Both pairs traveled together along the kelp, surfacing frequently. |  |
|  | 13:17-PDT | Saw: Blow |
|  | 20:17-GMT | Position: 110 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:22-PDT | Saw: Blow |
|  | 20:22-GMT | Position: $109^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Rolling |
|  | 13:25-PDT | Saw: Body |
|  | 20:25-GMT | Position: 111 / 1331 m Direction: West; Behavior: Speed slow • Breach |
|  | Calf breached with mouth open |  |
|  | 13:28-PDT | Saw: Blow |
|  | 20:28-GMT | Position: $115^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Bubbles |
|  | 13:33-PDT | Saw: Body |
|  | 20:33-GMT | Position: $124^{\circ}$ / 735 m Direction: West; Behavior: Speed slow $\bullet$ Traveling • Breach |
|  | 13:34-PDT | Saw: Body |
|  | 20:34-GMT | Position: $136^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling • Breach |
|  | 13:37-PDT | Saw: Body |
|  | 20:37-GMT | Position: $149^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:41-PDT | Saw: Body |
|  | 20:41-GMT | Position: $158^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:44-PDT | Saw: Body |
|  | 20:44-GMT | Position: 182 / 629 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:49-PDT | Saw: Body |
|  | 20:49-GMT | Position: $226^{\circ} / 508 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:52-PDT | Saw: Body Route past Holly: Inside |
|  | 20:52-GMT | Position: $260^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 18 | Quality: Good Beaufort: 2 | Total 1 - 0 Calves at sighting |
|  | 13:53-PDT | Saw: Body |
|  | 20:53-GMT | Position: $123^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:00-PDT | Saw: Blow |
|  | 21:00-GMT | Position: 144 / 696 m Direction: West; Behavior: Speed slow - Traveling |
|  | 14:04-PDT | Saw: Blow Route past Holly: Inside |
|  | 21:04-GMT | Position: 196 / 550 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 20 | Quality: Good Beaufort: 2 | Total 2-1 Calf at sighting |
| Images: 3444-3488 | 14:30-PDT | Saw: Body |
|  | 21:30-GMT | Position: 109 / 1208 m Direction: West; Behavior: Speed slow • Traveling |
|  | Pair was first seen along kelp off campus point. Traveled inside kelp in front of counter point. Calf surfaced a few more times than cow. Left kelp after passing Holly. |  |
|  | 14:35-PDT | Saw: Body |
|  | 21:35-GMT | Position: $118^{\circ} / 827 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:40-PDT | Saw: Blow |
|  | 21:40-GMT | Position: $131^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |



|  | 08:53-PDT | Saw: Body |
| :---: | :---: | :---: |
|  | 15:53-GMT | Position: $216^{\circ} / 508 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 08:57-PDT | Saw: Body Route past Holly: Inside |
|  | 15:57-GMT | Position: $252^{\circ} / 678 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 02 <br> Images: 3525-30 | Quality: Poor Beaufort: 1 | Total 2-1 Calf at sighting |
|  | 09:16-PDT | Saw: Body |
|  | 16:16-GMT | Position: $145^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Saw bodies surface outside kelp approaching counter point. Continued to travel outside kelp. Surfaced occasionally. |  |
|  | 09:17-PDT | Saw: Body |
|  | 16:17-GMT | Position: $149^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:18-PDT | Saw: Body |
|  | 16:18-GMT | Position: $153^{\circ} / 508 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 09:20-PDT | Saw: Body |
|  | 16:20-GMT | Position: $210^{\circ} / 440 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 09:21-PDT | Saw: Body |
|  | 16:21-GMT | Position: $216^{\circ} / 440 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:22-PDT | Saw: Body |
|  | 16:22-GMT | Position: $221^{\circ} / 455 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:27-PDT | Saw: Body |
|  | 16:27-GMT | Position: $279^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:33-PDT | Saw: Body Route past Holly: Inside |
|  | 16:33-GMT | Position: $291^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 10 | Quality: Poor | Total 2-1 Calf at sighting |
|  | Beaufort: 2 |  |
|  | 11:44-PDT | Saw: Body |
|  | 18:44-GMT | Position: 154 / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | Surfaced outside of kelp past Devereux. Continued to travel outside kelp. Difficult to see bodies due to the poor contrast and waves. |  |
|  | 11:47-PDT | Saw: Body |
|  | 18:47-GMT | Position: $182^{\circ}$ / 827 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:48-PDT | Saw: Body |
|  | 18:48-GMT | Position: $187^{\circ} / 946 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:49-PDT | Saw: Body |
|  | 18:49-GMT | Position: 193 / 946 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:53-PDT | Saw: Body |
|  | 18:53-GMT | Position: $231{ }^{\circ}$ / 1020 m Direction: West; Behavior: Speed slow |
|  | 11:54-PDT | Saw: Blow Route past Holly: Inside |
|  | 18:54-GMT | Position: $234^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 11 | Quality: Poor <br> Beaufort: 2 | Total 1 - 0 Calves at sighting |
|  | 11:51-PDT | CueTip: Surface Disturb / Saw: Blow |
|  | 18:51-GMT | Position: $120^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:53-PDT | Saw: Body |
|  | 18:53-GMT | Position: $126^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:54-PDT | Saw: Body |
|  | 18:54-GMT | Position: $128^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:56-PDT | Saw: Blow |
|  | 18:56-GMT | Position: $135^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 11:58-PDT | Saw: Body |
|  | 18:58-GMT | Position: $151^{\circ} / 946 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:59-PDT | Saw: Body |
|  | 18:59-GMT | Position: $155^{\circ}$ / 883 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |

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2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  | 09:04-PDT | Saw: Blow |
| :---: | :---: | :---: |
|  | 16:04-GMT | Position: $288^{\circ} / 883 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:07-PDT | Saw: Blow Route past Holly: Inside |
|  | 16:07-GMT | Position: $297^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | No calf sheet |  |
| Sighting Number 05 | Quality: Good | Total 2-1 Calf at sighting |
|  | Beaufort: 3 |  |
| Images: 3716-4011 | 09:01-PDT | Saw: Blow |
|  | 16:01-GMT | Position: 112 / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | Calf observation checklist includes Er sightings 5-8. Appeared along kelp past campus point. Eventually all C/c pairs joined together. Also were joined by Er sightings 1 and 10. Frequent surfacing and very difficult to distinguish individual pairs. Continued to travel close to shore at Sands. Images likely include Er sightings 1 and 10. |  |
|  |  |  |
|  | 09:03-PDT | Saw: Blow |
|  | 16:03-GMT | Position: 118 / 1020 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:06-PDT | Saw: Blow |
|  | 16:06-GMT | Position: 129 / 661 m Direction: West; Behavior: Speed slow - Traveling |
|  | 09:08-PDT | Saw: Body |
|  | 16:08-GMT | Position: $135^{\circ} / 661 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:09-PDT | Saw: Body |
|  | 16:09-GMT | Position: $142^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:10-PDT | Saw: Body |
|  | 16:10-GMT | Position: $148^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:11-PDT | Saw: Blow |
|  | 16:11-GMT | Position: $149^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:12-PDT | Saw: Blow |
|  | 16:12-GMT | Position: $149^{\circ} / 574 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:20-PDT | Saw: Body Route past Holly: Inside |
|  | 16:20-GMT | Position: $156^{\circ} / 356 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | Off counter point mingling with Er 1, 6-8. Impossible to distinguish individual C/c pairs. |  |
| Sighting Number 06 | Quality: Good | Total 2-1 Calf at sighting |
|  | Beaufort: 3 |  |
| Images: 3716-4011 | 09:04-PDT | Saw: Blow |
|  | 16:04-GMT | Position: 113 / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:07-PDT | Saw: Blow |
|  | 16:07-GMT | Position: $127^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 09:09-PDT | Saw: Blow |
|  | 16:09-GMT | Position: 129 / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:10-PDT | Saw: Blow Route past Holly: Inside |
|  | 16:10-GMT | Position: $133^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Off counter point. Mixed with Er 1,5,7,8 |  |
| Sighting Number 07 | Quality: Good | Total 2-1 Calf at sighting |
|  | Beaufort: 3 |  |
| Images: 3716-4011 | 09:05-PDT | Saw: Blow |
|  | 16:05-GMT | Position: 119 / 1331 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:07-PDT | Saw: Blow |
|  | 16:07-GMT | Position: $122^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:09-PDT | Saw: Blow |
|  | 16:09-GMT | Position: $122^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 09:11-PDT | Saw: Blow Route past Holly: Inside |
|  | 16:11-GMT | Position: $124^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | Off counter point. Mixed with Er 1,5,6,8 |  |


| Sighting Number 08 | Quality: Good Beaufort: 3 | Total 2-1 Calf at sighting |
| :---: | :---: | :---: |
| Images: 3716-4011 | 09:09-PDT | Saw: Blow |
|  | 16:09-GMT | Position: $114^{\circ}$ / 1208 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:10-PDT | Saw: Blow |
|  | 16:10-GMT | Position: $115^{\circ}$ / 1208 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:12-PDT | Saw: Blow |
|  | 16:12-GMT | Position: $123^{\circ}$ / 946 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 09:21 -PDT | Saw: Blow Route past Holly: Inside |
|  | 16:21-GMT | Position: $151^{\circ} / 629 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | Off counter point. Mixed with Er 1,5-7 |  |
| Sighting Number 10 <br> Images: 3716-4011 | Quality: Good | Total 2-1 Calf at sighting |
|  | Beaufort: 3 |  |
|  | 09:26-PDT | Saw: Blow |
|  | 16:26-GMT | Position: $130^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | First appeared outside kelp past Devereux. Surfaced occasionally and eventually joined Er 1, 5-8. |  |
|  | 09:32-PDT | Saw: Blow |
|  | 16:32-GMT | Position: $150^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 09:33-PDT | Saw: Body |
|  | 16:33-GMT | Position: $155^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:37-PDT | Saw: Blow |
|  | 16:37-GMT | Position: 185 / 661 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:39-PDT | Saw: Body Route past Holly: Inside |
|  | 16:39-GMT | Position: 194 / 629 m Direction: West; Behavior: Speed slow - Traveling |
|  | Joined Er 1,5-8 off Holly |  |
| Sighting Number 15 <br> Images: 4014-4024 | Quality: Fair | Total 2 - 1 Calf at sighting |
|  | Beaufort: 3 |  |
|  | 10:02-PDT | CueTip: Surface Disturb / Saw: Body |
|  | 17:02-GMT | Position: $123^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | First saw blows after Devereux outside of kelp. Traveled inside of kelp in front of counter point, then returned outside of kelp as it passed Holly. |  |
|  | 10:04-PDT | Saw: Blow |
|  | 17:04-GMT | Position: 142 / 661 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:07-PDT | Saw: Blow |
|  | 17:07-GMT | Position: $149^{\circ}$ / 455 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:08-PDT | Saw: Blow |
|  | 17:08-GMT | Position: $181^{\circ}$ / 426 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:13-PDT | Saw: Blow Route past Holly: Inside |
|  | 17:13-GMT | Position: $237^{\circ}$ / 528 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 16 <br> Images: 4027-54 | Quality: Fair Beaufort: 4 | Total 2-1 Calf at sighting |
|  | 10:35-PDT | Saw: Blow |
|  | 17:35-GMT | Position: $106^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | First observed (blows) just outside kelp off campus point. Very slow travel and did not surface very often. |  |
|  | 10:49-PDT | Saw: Blow |
|  | 17:49-GMT | Position: $108^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:54-PDT | Saw: Blow |
|  | 17:54-GMT | Position: $112^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 10:57-PDT | Saw: Blow |
|  | 17:57-GMT | Position: 118 / 913 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:00-PDT | Saw: Blow |
|  | 18:00-GMT | Position: $118^{\circ} / 827 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |

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| Sighting Number 07 | Quality: Poor <br> Beaufort: 0 | Total 2-1 Calf at sighting |
| :---: | :---: | :---: |
| Images: 4314-68 | First saw blows along kelp off campus point. Appeared to be nursing at Devereux in kelp. Pair then took route inside the kelp around Devereux and in front of counter point. Calf has white spot on head. Surfaced often. |  |
|  | 09:16-PDT | Saw: Blow |
|  | 16:16-GMT | Position: $99^{\circ} / 1674$ m Direction: West; Behavior: Speed slow - Traveling |
|  | 09:19-PDT | Saw: Blow |
|  | 16:19-GMT | Position: $101^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | In kelp |  |
|  | 09:22-PDT | Saw: Body |
|  | 16:22-GMT | Position: $104^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 09:23-PDT | Saw: Blow |
|  | 16:23-GMT | Position: $98^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:25-PDT | Saw: Blow |
|  | 16:25-GMT | Position: $103^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 09:26-PDT | Saw: Blow |
|  | 16:26-GMT | Position: $102^{\circ}$ / 1208 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:28-PDT | Saw: Blow |
|  | 16:28-GMT | Position: $103^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 09:29-PDT | Saw: Blow |
|  | 16:29-GMT | Position: 104 / 1106 m Direction: Still; Behavior: Speed slow • Fluke |
|  | Big whale staying on surface and calffluke (nursing) |  |
|  | 09:34-PDT | Saw: Blow |
|  | 16:34-GMT | Position: $106^{\circ} / 883 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:39-PDT | Saw: Body |
|  | 16:39-GMT | Position: $115^{\circ}$ / 489 m Direction: West; Behavior: Speed slow - Traveling |
|  | 09:41-PDT | Saw: Blow |
|  | 16:41-GMT | Position: $124^{\circ}$ / 388 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:42-PDT | Saw: Body |
|  | 16:42-GMT | Position: 160 / 300 m Direction: West; Behavior: Speed slow - Traveling |
|  | 09:44-PDT | Saw: Blow |
|  | 16:44-GMT | Position: 191 / 293 m Direction: West; Behavior: Speed slow - Traveling |
|  | 09:45-PDT | Saw: Body |
|  | 16:45-GMT | Position: $218^{\circ} / 307 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 09:48-PDT | Saw: Body |
|  | 16:48-GMT | Position: $248^{\circ} / 400 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:49-PDT | Saw: Body |
|  | 16:49-GMT | Position: $255^{\circ}$ / 471 m Direction: West; Behavior: Speed slow - Traveling |
|  | 09:54-PDT | Saw: Body Route past Holly: Inside |
|  | 16:54-GMT | Position: $291^{\circ}$ / 735 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 08 | Quality: Poor Beaufort: 0 | Total 2-1 Calf at sighting |
| Images: 4370-4422 | 09:17-PDT | Saw: Blow |
|  | 16:17-GMT | Position: 104 / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | First blows se point. Traveled | kelp off campus point. Moved very slowly as they made their way past counter kelp. Switched to outside of kelp in front of Holly. Surfaced often. |
|  | 09:19-PDT | Saw: Blow |
|  | 16:19-GMT | Position: $98^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow ${ }^{\text {e Traveling }}$ |
|  | 09:21-PDT | Saw: Blow |
|  | 16:21-GMT | Position: $107^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |


|  |  |  |
| :---: | :---: | :---: |
|  | 09:22-PDT | Saw: Blow |
|  | 16:22-GMT | Position: $107^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 09:26-PDT | Saw: Body |
|  | 16:26-GMT | Position: 105 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:31-PDT | Saw: Blow |
|  | 16:31-GMT | Position: 108 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | In kelp |  |
|  | 09:32-PDT | Saw: Blow |
|  | 16:32-GMT | Position: $106^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:35-PDT | Saw: Blow |
|  | 16:35-GMT | Position: $107^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 09:39-PDT | Saw: Body |
|  | 16:39-GMT | Position: 112 / 1020 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:42-PDT | Saw: Body |
|  | 16:42-GMT | Position: $121^{\circ} / 946 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:44-PDT | Saw: Blow |
|  | 16:44-GMT | Position: $124^{\circ}$ / 946 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 09:47-PDT | Saw: Blow |
|  | 16:47-GMT | Position: $126^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:49-PDT | Saw: Body |
|  | 16:49-GMT | Position: $125^{\circ} / 508 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:50-PDT | Saw: Body |
|  | 16:50-GMT | Position: $131^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:52-PDT | Saw: Blow |
|  | 16:52-GMT | Position: $164^{\circ} / 377$ m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:54-PDT | Saw: Blow |
|  | 16:54-GMT | Position: $186^{\circ} / 366 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 09:55-PDT | Saw: Body |
|  | 16:55-GMT | Position: $214^{\circ}$ / 412 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 09:56-PDT | Saw: Body |
|  | 16:56-GMT | Position: $219^{\circ} / 400 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 09:58-PDT | Saw: Body Route past Holly: Inside |
|  | 16:58-GMT | Position: $234^{\circ}$ / 455 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 09 | Quality: Poor Beaufort: 0 | Total 2-1 Calf at sighting |
| Images: 4424-49 | 09:31-PDT | Saw: Blow |
|  | 16:31-GMT | Position: 104 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | Blows first see route. Surface | mpus point along kelp. Traveled very slowly along kelp. Stuck to the outside arly. Spots on dorsal ridge. Images mixed with sighting \#12 |
|  | 09:33-PDT | Saw: Blow |
|  | 16:33-GMT | Position: $106^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:42-PDT | Saw: Blow |
|  | 16:42-GMT | Position: 110 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:43-PDT | Saw: Blow |
|  | 16:43-GMT | Position: $111^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:44-PDT | Saw: Blow |
|  | 16:44-GMT | Position: $111^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 09:46-PDT | Saw: Blow |
|  | 16:46-GMT | Position: 124 / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:50-PDT | Saw: Blow |
|  | 16:50-GMT | Position: $114^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 09:52-PDT | Saw: Blow |
|  | 16:52-GMT | Position: $116^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |

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|  | 09:55-PDT | Saw: Blow |
| :---: | :---: | :---: |
|  | 16:55-GMT | Position: 116 / 1020 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:57-PDT | Saw: Body |
|  | 16:57-GMT | Position: $124^{\circ}$ / 883 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:00-PDT | Saw: Blow |
|  | 17:00-GMT | Position: $135^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:02-PDT | Saw: Blow |
|  | 17:02-GMT | Position: 144 / 696 m Direction: West; Behavior: Speed slow - Traveling |
|  | Dots on dorsal ridge |  |
|  | 10:03-PDT | Saw: Body |
|  | 17:03-GMT | Position: 154 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:04-PDT | Saw: Body |
|  | 17:04-GMT | Position: $159^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 10:05-PDT | Saw: Body |
|  | 17:05-GMT | Position: $167^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 10:06-PDT | Saw: Body |
|  | 17:06-GMT | Position: 172 / 629 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:08-PDT | Saw: Body |
|  | 17:08-GMT | Position: 184 / 696 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:14-PDT | Saw: Body Route past Holly: Inside |
|  | 17:14-GMT | Position: $244^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 10 | Quality: Poor <br> Beaufort: 0 | Total 2-1 Calf at sighting |
| Images: 4451-4500 | 09:51-PDT | Saw: Blow |
|  | 16:51-GMT | Position: 102 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | Blows first seen off ca made their way acros Very slow- lots of surfa | mpus point. Stayed in the same area just off campus point for a long time. Slowly she channel. Traveled outside the kelp, until they approached counter point. acing |
|  | 09:58-PDT | Saw: Blow |
|  | 16:58-GMT | Position: 106 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:01-PDT | Saw: Blow |
|  | 17:01-GMT | Position: 105 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:13-PDT | Saw: Blow |
|  | 17:13-GMT | Position: 110/ 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:15-PDT | Saw: Blow |
|  | 17:15-GMT | Position: 112 / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:19-PDT | Saw: Blow |
|  | 17:19-GMT | Position: 119 / 946 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:21-PDT | Saw: Body |
|  | 17:21-GMT | Position: 123 / 1020 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:25-PDT | Saw: Blow |
|  | 17:25-GMT | Position: $137^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 10:27-PDT | Saw: Blow |
|  | 17:27-GMT | Position: 147 / 412 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:29-PDT | Saw: Body |
|  | 17:29-GMT | Position: 172 / 356 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:32-PDT | Saw: Body |
|  | 17:32-GMT | Position: 208 / 347 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:38-PDT | Saw: Body Route past Holly: Inside |
|  | 17:38-GMT | Position: $261^{\circ} / 471 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |


| Sighting Number 12 | Quality: Poor Beaufort: 0 | Total 2-1 Calf at sighting |
| :---: | :---: | :---: |
| Images: 4424-4450 | First blows seen off campus point. Traveled along outside of kelp. Moved offshore. Images mixed with sighting \#9. | Saw: Blow <br> Position: $109^{\circ}$ / 1020 m Direction: West; Behavior: Speed slow • Traveling <br> mpus point. Traveled along outside of kelp. Moved offshore. Images mixed with |
|  | 10:07-PDT | Saw: Body |
|  | 17:07-GMT | Position: $128^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 10:10-PDT | Saw: Body |
|  | 17:10-GMT | Position: 158 / 629 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:16-PDT | Saw: Body |
|  | 17:16-GMT | Position: $194^{\circ}$ / 778 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:20-PDT | Saw: Body |
|  | 17:20-GMT | Position: $224^{\circ}$ / 735 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:29-PDT | Saw: Body Route past Holly: Inside |
|  | 17:29-GMT | Position: $293^{\circ}$ / 1208 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 35 <br> Images: 4506-23 | Quality: Fair <br> Beaufort: 1 | Total 2-1 Calf at sighting |
|  | 14:00-PDT | Saw: Body |
|  | 21:00-GMT | Position: $121^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Saw blows off campus point. Traveled inside kelp in front of counter point. Went to outside of kelp after passing Holly. Did not surface very often. Possible photo ID image of cow. |  |
|  | 14:02-PDT | Saw: Blow |
|  | 21:02-GMT | Position: $134^{\circ}$ / 574 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:06-PDT | Saw: Body |
|  | 21:06-GMT | Position: $138^{\circ}$ / 400 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:07-PDT | Saw: Body |
|  | 21:07-GMT | Position: $173^{\circ} / 412 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 14:09-PDT | Saw: Blow |
|  | 21:09-GMT | Position: 197 / 388 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:10-PDT | Saw: Blow |
|  | 21:10-GMT | Position: $218^{\circ}$ / 489 m Direction: Circling; Behavior: Speed slow |
|  | 14:14-PDT | Saw: Blow |
|  | 21:14-GMT | Position: $256^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 14:16-PDT | Saw: Blow Route past Holly: Inside |
|  | 21:16-GMT | Position: $277^{\circ}$ / 778 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 43 <br> Images: 4529-65 | Quality: Fair <br> Beaufort: 1 | Total 2-1 Calf at sighting |
|  | 15:32-PDT | Saw: Blow |
|  | 22:32-GMT | Position: 108 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | First seen off campus point. Not very showy. Slow. Stayed just outside the kelp. |  |
|  | 15:44-PDT | Saw: Blow |
|  | 22:44-GMT | Position: $117^{\circ} / 1403 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 15:56-PDT | Saw: Blow |
|  | 22:56-GMT | Position: $127^{\circ}$ / 827 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 16:01-PDT | Saw: Blow |
|  | 23:01-GMT | Position: $160^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 16:04-PDT | Saw: Body |
|  | 23:04-GMT | Position: $175^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 16:08-PDT | Saw: Body |
|  | 23:08-GMT | Position: $193^{\circ} / 574 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 16:15-PDT | Saw: Body Route past Holly: Inside |
|  | 23:15-GMT | Position: $245^{\circ} / 629 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |



|  | 10:07-PDT | Saw: Body Route past Holly: Inside |
| :---: | :---: | :---: |
|  | 17:07-GMT | Position: $299^{\circ}$ / 883 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 11 | Quality: Poor <br> Beaufort: 0 | Total 2-1 Calf at sighting |
| Images: 4665-4731 | 10:20-PDT | Saw: Blow |
|  | 17:20-GMT | Position: 99\% 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | Blows were first seen off campus point outside of kelp. Traveled very slowly along kelp. Calf has unique white spot on dorsal ridge. Pair surfaced facing east just before counter point, but quickly turned itself around traveling well inside of kelp, surfacing often. Calf frequently switched sides. |  |
|  | 10:24-PDT | Saw: Blow |
|  | 17:24-GMT | Position: 102 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:28-PDT | Saw: Blow |
|  | 17:28-GMT | Position: 104 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:29-PDT | Saw: Blow |
|  | 17:29-GMT | Position: 106 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:32-PDT | Saw: Blow |
|  | 17:32-GMT | Position: 108 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:38-PDT | Saw: Blow |
|  | 17:38-GMT | Position: 110 / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:43-PDT | Saw: Blow |
|  | 17:43-GMT | Position: 114 / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:48-PDT | Saw: Blow |
|  | 17:48-GMT | Position: $125^{\circ}$ / 827 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:51-PDT | Saw: Blow |
|  | 17:51-GMT | Position: $143^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 10:53-PDT | Saw: Blow |
|  | 17:53-GMT | Position: $154^{\circ} / 528 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 10:55-PDT | Saw: Blow |
|  | 17:55-GMT | Position: 172 / 412 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:57-PDT | Saw: Blow |
|  | 17:57-GMT | Position: 204 / 356 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:59-PDT | Saw: Blow |
|  | 17:59-GMT | Position: $221^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:01-PDT | Saw: Blow |
|  | 18:01-GMT | Position: $247^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:03-PDT | Saw: Blow Route past Holly: Inside |
|  | 18:03-GMT | Position: $260^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 36 | Quality: Poor <br> Beaufort: 1 | Total 2-1 Calf at sighting |
| Images: 4890-4912 | 15:23-PDT | Saw: Blow |
|  | 22:23-GMT | Position: 105 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | Saw pair off campus point. Calf was on inside traveling slowly along kelp. Continued along the kelp until they passed Holly. Surfaced somewhat frequently. |  |
|  | 15:29-PDT | Saw: Blow |
|  | 22:29-GMT | Position: 106 / 2260 m Direction: West; Behavior: Speed slow • Traveling • Fluke |
|  | 15:31-PDT | Saw: Blow |
|  | 22:31-GMT | Position: 107 $/ 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 15:33-PDT | Saw: Blow |
|  | 22:33-GMT | Position: 109 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:34-PDT | Saw: Blow |
|  | 22:34-GMT | Position: 108 / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:37-PDT | Saw: Blow |
|  | 22:37-GMT | Position: 109 / 1483 m Direction: West; Behavior: Speed slow • Traveling |

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|  | 12:18-PDT | Saw: Blow |
| :---: | :---: | :---: |
|  | 19:18-GMT | Position: $121^{\circ} / 1020 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:20-PDT | Saw: Blow |
|  | 19:20-GMT | Position: $129^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:22-PDT | Saw: Blow |
|  |  | Position: $140^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | Likely nursing |  |
|  | 12:27-PDT | Saw: Body |
|  | 19:27-GMT | Position: 171 / 412 m Direction: West; Behavior: Speed slow - Traveling |
|  | 12:29-PDT | Saw: Blow |
|  | 19:29-GMT | Position: $220^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:33-PDT | Saw: Blow |
|  | 19:33-GMT | Position: $232^{\circ} / 528 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:34-PDT | Saw: Body |
|  | 19:34-GMT | Position: $250^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:38-PDT | Saw: Body Route past Holly: Inside |
|  | 19:38-GMT | Position: $279^{\circ}$ / 827 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 22 | Quality: Poor Beaufort: 0 | Total 2-1 Calf at sighting |
| Images: 5075-5129 | 12:42-PDT | Saw: Blow |
|  | 19:42-GMT | Position: $115^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | First spotted off far down Sand | vereux side of campus point. Mother seen more than calf. Stayed along kelp until moved off some |
|  | 12:45-PDT | Saw: Body |
|  | 19:45-GMT | Position: $119^{\circ}$ / 1331 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:48-PDT | Saw: Body |
|  | 19:48-GMT | Position: $134^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:51-PDT | Saw: Body |
|  | 19:51-GMT | Position: $166^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:53-PDT | Saw: Blow |
|  | 19:53-GMT | Position: 189 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  | 12:57-PDT | Saw: Blow |
|  | 19:57-GMT | Position: $241^{\circ}$ / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  | 12:59-PDT | Saw: Blow |
|  | 19:59-GMT | Position: $263^{\circ}$ / 778 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:07-PDT | Saw: Body Route past Holly: Inside |
|  | 20:07-GMT | Position: $290^{\circ}$ / 1674 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 35 | Quality: Fair <br> Beaufort: 0 | Total 2-1 Calf at sighting |
| Images: 5166-97 | 15:42-PDT |  |
|  | 22:42-GMT | Position: $144^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  |  |  |
|  | 15:46-PDT | Saw: Body |
|  | 22:46-GMT | Position: $172^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:47-PDT | Saw: Body |
|  | 22:47-GMT | Position: $183^{\circ} / 678 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 15:50-PDT | Saw: Body |
|  | 22:50-GMT | Position: $216^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:51-PDT | Saw: Body |
|  | 22:51-GMT | Position: $226^{\circ} / 678 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:53-PDT | Saw: Body |
|  | 22:53-GMT | Position: $240^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


|  |  |  |
| :---: | :---: | :---: |
|  | 11:37-PDT | Saw: Blow |
|  | 18:37-GMT | Position: $204^{\circ}$ / 307 m Direction: West; Behavior: Speed slow • Traveling |
|  | both bodies |  |
|  | 11:39-PDT | Saw: Blow |
|  | 18:39-GMT | Position: $225^{\circ} / 307 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 11:40-PDT | Saw: Blow |
|  | 18:40-GMT | Position: $237^{\circ} / 400 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:42-PDT | Saw: Body |
|  | 18:42-GMT | Position: $241^{\circ} / 388 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Spyhop $\bullet$ Fluke |
|  | both in kelp playing |  |
|  | 11:48-PDT | Saw: Body |
|  | 18:48-GMT | Position: $263^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:51-PDT | Saw: Blow Route past Holly: Inside |
|  | 18:51-GMT | Position: $278{ }^{\circ} / 661 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 05 | Quality: Fair | Total 2 - 1 Calf at sighting |
|  | Beaufort: 2 |  |
| Images: 5589-5594 | 11:57-PDT | Saw: Blow |
|  | 18:57-GMT | Position: 101 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | Saw first blows off C Counter Pt. Pair barel | mpus Pt. Traveled along kelp before \& after Counter Pt. Surfaced briefly in front of surfaced. |
|  | 12:06-PDT | Saw: Blow |
|  | 19:06-GMT | Position: $107^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:14-PDT | Saw: Body |
|  | 19:14-GMT | Position: 110 / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:25-PDT | Saw: Body |
|  | 19:25-GMT | Position: 128 / 913 m Direction: West; Behavior: Speed slow - Traveling |
|  | Barely surfacing |  |
|  | 12:58-PDT | Saw: Body |
|  | 19:58-GMT | Position: $151^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | calf head |  |
|  | 12:30-PDT | Saw: Body |
|  | 19:30-GMT | Position: $164^{\circ} / 471$ m Direction: West; Behavior: Speed slow • Traveling |
|  | Cow |  |
|  | 12:32-PDT | Saw: Blow |
|  | 19:32-GMT | Position: $206^{\circ}$ / 356 m Direction: West; Behavior: Speed slow • Traveling |
|  | inside kelp |  |
|  | 12:37-PDT | Saw: Body Route past Holly: Inside |
|  | 19:37-GMT | Position: $262^{\circ}$ / 550 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 07 | Quality: Poor Beaufort: 3 | Total 6-3 Calves at sighting |
| Images: 5596-5812 | 13:50-PDT | Saw: Blow |
|  | 20:50-GMT | Position: $101^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | First spotted coming stuck close together. | round Campus Point. Traveled through kelp, very slowly, surfaced often, and ollowed by paddle-boarder for a little bit in IV kelp. |
|  | 13:55-PDT | Saw: Blow |
|  | 20:55-GMT | Position: 103 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:03-PDT | Saw: Body |
|  | 21:03-GMT | Position: 103 / 2260 m Direction: West; Behavior: Speed slow • Traveling • Spyhop |
|  | 14:13-PDT | Saw: Blow |
|  | 21:13-GMT | Position: 104 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:18-PDT | Saw: ni |
|  | 21:18-GMT | Position: 105 / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:25-PDT | Saw: Blow |
|  | 21:25-GMT | Position: $101^{\circ} / 1331 \mathrm{~m}$ Direction: Circling; Behavior: Speed slow $\bullet$ Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  | 14:27-PDT | Saw: Blow |
| :---: | :---: | :---: |
|  | 21:27-GMT | Position: 104 / 1331 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:28-PDT | Saw: Blow |
|  | 21:28-GMT | Position: $107^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:35-PDT | Saw: Blow |
|  | 21:35-GMT | Position: 110 / 1020 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:37-PDT | Saw: Body |
|  | 21:37-GMT | Position: $115^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 14:41-PDT | Saw: Body |
|  | 21:41-GMT | Position: $122^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling • Spyhop |
|  | 14:44-PDT | Saw: Blow |
|  | 21:44-GMT | Position: 144 / 356 m Direction: West; Behavior: Speed slow - Traveling |
|  | 14:45-PDT | Saw: Blow |
|  | 21:45-GMT | Position: 170 / 253 m Direction: West; Behavior: Speed slow - Traveling |
|  | 14:47-PDT | Saw: Blow |
|  | 21:47-GMT | Position: 184 / 280 m Direction: West; Behavior: Speed slow - Traveling |
|  | 14:49-PDT | Saw: Blow |
|  | 21:49-GMT | Position: $211^{\circ}$ / 293 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:51-PDT | Saw: Body |
|  | 21:51-GMT | Position: $232^{\circ} / 356 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:54-PDT | Saw: Body |
|  | 21:54-GMT | Position: $252^{\circ}$ / 440 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:56-PDT | Saw: Blow Route past Holly: Inside |
|  | 21:56-GMT | Position: $268^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 13 | Quality: Poor | Total 2-1 Calf at sighting |
|  | Beaufort: 3 |  |
| Images: 5814-5843 | 16:28-PDT | Saw: Blow |
|  | 23:28-GMT | Position: 104 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | Calf has white spot on body.First saw off of Campus Pt. Traveled along kelp. |  |
|  | 16:35-PDT | Saw: Blow |
|  | 23:35-GMT | Position: 108 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 16:38-PDT | Saw: Blow |
|  | 23:38-GMT | Position: 109 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 16:45-PDT | Saw: Blow |
|  | 23:45-GMT | Position: 111 / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | 16:49-PDT | Saw: ni |
|  | 23:49-GMT | Position: 112 / 1208 m Direction: West; Behavior: Speed slow • Traveling |
|  | 16:52-PDT | Saw: Blow |
|  | 23:52-GMT | Position: $116^{\circ} / 883 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 16:56-PDT | Saw: Body |
|  | 23:56-GMT | Position: $126^{\circ} / 629 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 16:58-PDT | Saw: Body |
|  | 23:58-GMT | Position: 134 / 600 m Direction: West; Behavior: Speed slow • Traveling |
|  | 17:00-PDT | Saw: Body |
|  | 0:00; 5/5/2014-GMT | Position: 144 / 426 m Direction: West; Behavior: Speed slow • Traveling |
|  | 17:03-PDT | Saw: Body |
|  | 0:03; 5/5/2014-GMT | Position: $166^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 17:05-PDT | Saw: Blow |
|  | 0:05; 5/5/2014-GMT | Position: $209^{\circ}$ / 388 m Direction: West; Behavior: Speed slow • Traveling |
|  | 17:07-PDT | Saw: Body Route past Holly: Inside |
|  | 0:07; 5/5/2014-GMT | Position: $224^{\circ} / 426 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |

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2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

| Sighting Number 11 | Quality: Poor <br> Beaufort: 2 | Total 2-1 Calf at sighting |
| :---: | :---: | :---: |
| Images: 5994-6034 | 11:41-PDT | Saw: Blow |
|  | 18:41-GMT | Position: $106^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Saw first blows oof kelp just off Campus Point. Traveled along outside kelp. Were inside kelp briefly in front of Counter Point. Surfaced regularly. |  |
|  | 11:44-PDT | Saw: Blow |
|  | 18:44-GMT | Position: $109^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:47-PDT | Saw: Blow |
|  | 18:47-GMT | Position: 110 / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:48-PDT | Saw: Blow |
|  | 18:48-GMT | Position: 110 / 1922 m Direction: Still; Behavior: Speed slow • Traveling |
|  | 11:49-PDT | Saw: Blow |
|  | 18:49-GMT | Position: 111 / 1674 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:52-PDT | Saw: Blow |
|  | 18:52-GMT | Position: $112^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:54-PDT | Saw: Blow |
|  | 18:54-GMT | Position: $113^{\circ} / 1403 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:58-PDT | Saw: Blow |
|  | 18:58-GMT | Position: $119^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:02-PDT | Saw: Blow |
|  | 19:02-GMT | Position: $135^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:04-PDT | Saw: Blow |
|  | 19:04-GMT | Position: 156 / 600 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:07-PDT | Saw: Blow |
|  | 19:07-GMT | Position: 178 / 455 m Direction: West; Behavior: Speed slow - Traveling |
|  | 12:09-PDT | Saw: Body |
|  | 19:09-GMT | Position: $207^{\circ} / 412 \mathrm{~m}$ Direction: West; Behavior: Speed slow ${ }^{\text {e Traveling }}$ |
|  | 12:10-PDT | Saw: Blow |
|  | 19:10-GMT | Position: $216^{\circ}$ / 455 m Direction: West; Behavior: Speed slow - Traveling |
|  | 12:13-PDT | Saw: Blow |
|  | 19:13-GMT | Position: $250^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:14-PDT | Saw: Blow |
|  | 19:14-GMT | Position: $262^{\circ}$ / 778 m Direction: West; Behavior: Speed slow - Traveling |
|  | 12:17-PDT | Saw: Body Route past Holly: Inside |
|  | 19:17-GMT | Position: $275^{\circ}$ / 1020 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 15 | Quality: Fair Beaufort: 2 | Total 4-2 Calves at sighting |
| Images: 6036-6086 | 13:01-PDT | Saw: Blow |
|  | 20:01-GMT | Position: $111^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | Saw blow off Campus Pt. Nice separation of two pairs. Surfaced just about at the same time. Traveled around stick: some inside; some outside |  |
|  | 13:02-PDT | Saw: Blow |
|  | 20:02-GMT | Position: $114^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:03-PDT | Saw: Blow |
|  | 20:03-GMT | Position: $115^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:05-PDT | Saw: Body |
|  | 20:05-GMT | Position: $119^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 12:07-PDT | Saw: Blow |
|  | 19:07-GMT | Position: $126^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:08-PDT | Saw: Blow |
|  | 20:08-GMT | Position: $127^{\circ}$ / 1020 m Direction: West; Behavior: Speed slow • Traveling |


|  |  |  |
| :---: | :---: | :---: |
|  | 13:09-PDT | Saw: Body |
|  | 20:09-GMT | Position: $139^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:11-PDT | Saw: Blow |
|  | 20:11-GMT | Position: $146^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:12-PDT | Saw: Blow |
|  | 20:12-GMT | Position: $151^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:16-PDT | Saw: Body |
|  | 20:16-GMT | Position: 198 / 550 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:17-PDT | Saw: Blow |
|  | 20:17-GMT | Position: $204^{\circ} / 508 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:18-PDT | Saw: Blow |
|  | 20:18-GMT | Position: $218^{\circ} / 508 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:20-PDT | Saw: Blow |
|  | 20:20-GMT | Position: $233^{\circ}$ / 550 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:22-PDT | Saw: Blow |
|  | 20:22-GMT | Position: $254^{\circ} / 629 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:28-PDT | Saw: Blow Route past Holly: Inside |
|  | 20:28-GMT | Position: $275^{\circ}$ / 1208 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 18 | Quality: Fair Beaufort: 2 | Total 2-1 Calf at sighting |
| Images: 6091-6155 | 14:13-PDT | Saw: |
|  | 21:13-GMT | Position: $106^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | First spotted entered the stick. | mpus Pt. Very, very slow and meandering. Not very showy. West of Campus Pt. ed around in kelp on Sands sideof Counter Pt. Exited kelp, then lost them before |
|  | 14:18-PDT | Saw: Body |
|  | 21:18-GMT | Position: 109 / 2260 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:19-PDT | Saw: Blow |
|  | 21:19-GMT | Position: 110 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:23-PDT | Saw: Body |
|  | 21:23-GMT | Position: 108 / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:21-PDT | Saw: Body |
|  | 21:21-GMT | Position: $108^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:31-PDT | Saw: Body |
|  | 21:31-GMT | Position: $117^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:34-PDT | Saw: Blow |
|  | 21:34-GMT | Position: $119^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 14:35-PDT | Saw: Body |
|  | 21:35-GMT | Position: $123^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:36-PDT | Saw: Body |
|  | 21:36-GMT | Position: 132 / 629 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:39-PDT | Saw: Body |
|  | 21:39-GMT | Position: $142^{\circ} / 400 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  |  |
|  | 14:40-PDT | Saw: Body |
|  | 21:40-GMT | Position: $150^{\circ} / 338 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:41-PDT | Saw: Body |
|  | 21:41-GMT | Position: $157^{\circ} / 314 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Cow has ver | Ve mark |
|  | 14:43-PDT | Saw: Body |
|  | 21:43-GMT | Position: $214^{\circ} / 314 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:44-PDT | Saw: Body |
|  | 21:44-GMT | Position: $227^{\circ} / 322 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  | 14:45-PDT | Saw: Body |
| :---: | :---: | :---: |
|  | 21:45-GMT | Position: $233^{\circ}$ / 314 m Direction: Circling; Behavior: Speed slow • Traveling |
|  | 14:47-PDT | Saw: Blow |
|  | 21:47-GMT | Position: $228^{\circ}$ / 347 m Direction: Circling; Behavior: Speed slow ${ }^{\text {e Traveling }}$ |
|  | 14:48-PDT | Saw: Body |
|  | 21:48-GMT | Position: $235^{\circ} / 314 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:52-PDT | Saw: Body Route past Holly: Inside |
|  | 21:52-GMT | Position: $269^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | outside kelp |  |
| Sighting Number 20 | Quality: Fair | Total 2-1 Calf at sighting |
|  | Beaufort: 2 |  |
| Images: 6158-6168 | 14:55-PDT | Saw: Blow |
|  | 21:55-GMT | Position: 101 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | First spotted off Campus Pt. Fast, long downtimes, short uptimes. Stayed further off the kelp than usual. |  |
|  | 14:57-PDT | Saw: Blow |
|  | 21:57-GMT | Position: 107 $/ 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 14:58-PDT | Saw: Body |
|  | 21:58-GMT | Position: 110 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:02-PDT | Saw: Blow |
|  | 22:02-GMT | Position: $167^{\circ} / 946 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:03-PDT | Saw: Blow |
|  | 22:03-GMT | Position: $171^{\circ} / 883 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:09-PDT | Saw: Blow |
|  | 22:09-GMT | Position: $220^{\circ}$ / 883 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 15:11-PDT | Saw: Blow Route past Holly: Inside |
|  | 22:11-GMT | Position: $229^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 22 | Quality: Fair | Total 2-1 Calf at sighting |
|  | Beaufort: 3 |  |
| Images: 6170-6207 | 15:11-PDT | Saw: Blow |
|  | 22:11-GMT | Position: 119 / 1020 m Direction: West; Behavior: Speed slow • Traveling |
|  | Whitecaps inside Holly. |  |
|  | First seen Devereux side of Counter Point. Cow has distinctive dorsal ridge. Entered kelp off Campus |  |
|  | 15:15-PDT | Saw: Body |
|  | 22:15-GMT | Position: 139 / 629 m Direction: West; Behavior: Speed slow - Traveling |
|  | Cow has prominent dorsal ridge |  |
|  | 15:18-PDT | Saw: Body |
|  | 22:18-GMT | Position: $167^{\circ} / 508 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:20-PDT | Saw: Body |
|  | 22:20-GMT | Position: $189^{\circ}$ / 426 m Direction: West; Behavior: Speed slow • Traveling |
|  | 15:22-PDT | Saw: Body |
|  | 22:22-GMT | Position: $224^{\circ} / 508 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:37-PDT | Saw: Body Route past Holly: Inside |
|  | 22:37-GMT | Position: 199 / 600 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 23 | Quality: Fair Beaufort: 3 | Total 2-1 Calf at sighting |
| Images: 6209-6225 | 15:21-PDT | Saw: Blow |
|  | 22:21-GMT | Position: $107^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | First seen west of Campus Pt. Along kelp all the way. Normal breathing cycle, medium down and surface times. Let go after approach to Counter Pt because wind was building and wanted to ID whales at Campus Pt. |  |
|  | 15:24-PDT | Saw: Blow |
|  | 22:24-GMT | Position: 114 / 1106 m Direction: West; Behavior: Speed slow • Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  | 15:29-PDT | Saw: Blow |
| :---: | :---: | :---: | :---: |
|  |  | 22:29-GMT | Position: $129^{\circ} / 661$ m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 15:30-PDT | Saw: Blow |
|  |  | 22:30-GMT | Position: 135 / 661 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 15:31-PDT | Saw: Blow Route past Holly: nd |
|  |  | 22:31-GMT | Position: 138 / 629 m Direction: West; Behavior: Speed slow - Traveling |
|  | Sighting Number 24 <br> Images: 6227-6236 | Quality: Fair | Total 2-1 Calf at sighting |
|  |  | Beaufort: 4 |  |
|  |  | 15:32-PDT | Saw: Blow |
|  |  | 22:32-GMT | Position: $104^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:41-PDT | Saw: Blow |
|  |  | 22:41-GMT | Position: 108 / 2260 m Direction: West; Behavior: Speed slow P Traveling $^{\text {a }}$ |
|  |  | 15:44-PDT | Saw: Blow |
|  |  | 22:44-GMT | Position: $109^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:48-PDT | Saw: Blow |
|  |  | 22:48-GMT | Position: $112^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 15:49-PDT | Saw: Body |
|  |  | 22:49-GMT | Position: $113^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 15:53-PDT | Saw: Body |
|  |  | 22:53-GMT | Position: $119^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 15:57-PDT | Saw: Body Route past Holly: nd |
|  |  | 22:57-GMT | Position: $129^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | Sighting Number 25 <br> Images: 6282-6354 | Quality: Fair | Total 4-2 Calves at sighting |
|  |  | Beaufort: 4 |  |
|  |  | 15:55-PDT | Saw: Blow |
|  |  | 22:55-GMT | Position: $102^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | Images made | ORT beginning @ 1640 |
|  | Sighting Number 26 <br> Images: 6238-6280 | Quality: Fair | Total 2-1 Calf at sighting |
|  |  | Beaufort: 4 |  |
|  |  | 16:02-PDT |  |
|  |  | 23:02-GMT | Position: $106^{\circ} / 778$ m Direction: West; Behavior: Speed slow • Traveling |
| May 07 | Day 87 of 107 | Gray whale (northbound) |  |
|  | Sighting Number 01 <br> Images: 6531-6554 | Quality: Poor | Total 2-1 Calf at sighting |
|  |  | Beaufort: 3 |  |
|  |  | 09:00-PDT | Saw: Blow |
|  |  | 16:00-GMT | Position: $127^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | Saw first blow | Devereux kelp. Traveled outside kelp. With Zc. Did not surface very often. |
|  |  | 09:01-PDT | Saw: Blow |
|  |  | 16:01-GMT | Position: 132 / 696 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 09:04-PDT | Saw: Blow |
|  |  | 16:04-GMT | Position: $156^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  |  | 09:04-PDT | Saw: Blow |
|  |  | 16:04-GMT | Position: 161 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | with Zc |  |
|  |  | 09:07-PDT | Saw: Body |
|  |  | 16:07-GMT | Position: 188 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 09:12-PDT | Saw: Body |
|  |  | 16:12-GMT | Position: $244^{\circ} / 528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 09:13-PDT | Saw: Blow |
|  |  | 16:13-GMT | Position: $251^{\circ} / 528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 09:17-PDT | Saw: Body Route past Holly: Inside |
|  |  | 16:17-GMT | Position: $277^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow |

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| Sighting Number 05 | Quality: Fair <br> Beaufort: 3 | Total 6-3 Calves at sighting |
| :---: | :---: | :---: |
| Images: 6556-6626 | $\begin{aligned} & \hline \text { 10:01 -PDT } \\ & \text { 17:01-GMT } \\ & \text { many blows } \\ & \text { First spotted bey } \\ & \text { surface more ofte } \\ & \text { side of Counter } \end{aligned}$ | Saw: Blow <br> Position: $102^{\circ}$ / 2749 m Direction: West; Behavior: Speed slow • Traveling <br> elp finger at Campus Pt. Slight separation between pairs. One pair seemed to came together off devereux side of Counter Point. Moved inside kelp off Sands then moved outside. |
|  | 10:06-PDT | Saw: Blow |
|  | 17:06-GMT | Position: $104^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 10:12-PDT | Saw: Blow |
|  | 17:12-GMT | Position: $107^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 10:16-PDT | Saw: Blow |
|  | 17:16-GMT | Position: 110 / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:25-PDT | Saw: Blow |
|  | 17:25-GMT | Position: $111^{\circ}$ / 1208 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:32-PDT | Saw: Blow |
|  | 17:32-GMT | Position: $121^{\circ}$ / 735 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:35-PDT | Saw: Blow |
|  | 17:35-GMT | Position: $136^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 10:38-PDT | Saw: Body |
|  | 17:38-GMT stilloutside kelp | Position: $149^{\circ} / 508 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 10:40-PDT | Saw: Body |
|  | 17:40-GMT | Position: $164^{\circ}$ / 489 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:43-PDT | Saw: Blow |
|  | 17:43-GMT | Position: 192 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:47-PDT | Saw: Body |
|  | 17:47-GMT | Position: $218^{\circ}$ / 400 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | inside kelp |  |
|  | 10:49-PDT | Saw: Blow |
|  | 17:49-GMT | Position: $224^{\circ}$ / 528 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:51-PDT | Saw: |
|  | 17:51-GMT | Position: $244^{\circ}$ / 574 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:53-PDT | Saw: Body |
|  | 17:53-GMT | Position: $259^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 10:55-PDT | Saw: Blow Route past Holly: Inside |
|  | 17:55-GMT | Position: $284^{\circ} / 629 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Fluke |
| Sighting Number 08 | Quality: Poor <br> Beaufort: 3 | Total 2 - 1 Calf at sighting |
| Images: 6628-6646 | 11:00-PDT | Saw: Blow |
|  | 18:00-GMT | Position: 107 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 2 blowsFirst saw blows at Campus Pt along kelp. Came inside kelp in front of Counter Point. Moving west they traveled outside kelp. Rarely surfaced. |  |
|  | 11:06-PDT | Saw: Blow |
|  | 18:06-GMT | Position: $109^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:07-PDT | Saw: Blow |
|  | 18:07-GMT | Position: $109^{\circ}$ / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:12-PDT | Saw: Blow |
|  | 18:12-GMT | Position: $112^{\circ} / 1403 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:15-PDT | Saw: Blow |
|  | 18:15-GMT | Position: $117^{\circ}$ / 883 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:19-PDT | Saw: Blow |
|  | 18:19-GMT | Position: $130^{\circ} / 629 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |

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|  |  |  |
| :---: | :---: | :---: |
|  | 11:24-PDT | Saw: Body |
|  | 18:24-GMT | Position: 168 / 412 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:27-PDT | Saw: Body |
|  | 18:27-GMT | Position: 198 / 377 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:30-PDT | Saw: Body Route past Holly: Inside |
|  | 18:30-GMT | Position: $234^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 09 | Quality: Poor Beaufort: 3 | Total 2-1 Calf at sighting |
| Images: 6648-6666 | 11:11-PDT | Saw: Blow |
|  | 18:11-GMT | Position: $106^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | Saw first blows along kelp off Campus Pt. Traveled along kelp - Was inside kelp briefly in front of Counter Pt, then moved back outside. Surfaced fairly regularly. |  |
|  | 11:19-PDT | Saw: Blow |
|  | 18:19-GMT | Position: 110 / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:25-PDT | Saw: Blow |
|  | 18:25-GMT | Position: $115^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 11:29-PDT | Saw: Blow |
|  | 18:29-GMT | Position: $120^{\circ}$ / 1020 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:30-PDT | Saw: Blow |
|  | 18:30-GMT | Position: $125^{\circ} / 883 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:36-PDT | Saw: Body |
|  | 18:36-GMT | Position: $158^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:37-PDT | Saw: Body |
|  | 18:37-GMT | Position: $161^{\circ} / 440 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:40-PDT | Saw: Body |
|  | 18:40-GMT | Position: 174 / 440 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:43-PDT | Saw: Blow |
|  | 18:43-GMT | Position: $222^{\circ} / 455 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:46-PDT | Saw: Blow Route past Holly: Inside |
|  | 18:46-GMT | Position: $250^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| Sighting Number 13 | Quality: Poor Beaufort: 4 | Total 2-1 Calf at sighting |
| Images: 6668-6687 | 13:35-PDT | Saw: Blow |
|  | 20:35-GMT | Position: 107 / 1674 m Direction: West; Behavior: Speed slow • Traveling |
|  | First seen off Campus Point. Mostly stayed outside of kelp, but came through kelp off Counter Point. |  |
|  | 13:40-PDT | Saw: Blow |
|  | 20:40-GMT | Position: $110^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:42-PDT | Saw: Blow |
|  | 20:42-GMT | Position: 110 / 1208 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:45-PDT | Saw: Blow |
|  | 20:45-GMT | Position: $120^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:48-PDT | Saw: Body |
|  | 20:48-GMT | Position: $126^{\circ}$ / 827 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:49-PDT | Saw: Blow |
|  | 20:49-GMT | Position: $134^{\circ}$ / 735 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:52-PDT | Saw: Body |
|  | 20:52-GMT | Position: $159^{\circ} / 528 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | in kelp |  |
|  | 13:53-PDT | Saw: Body |
|  | 20:53-GMT | Position: $181^{\circ} / 400 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:54-PDT | Saw: Body |
|  | 20:54-GMT | Position: 188 / 412 m Direction: West; Behavior: Speed slow - Traveling |

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2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  |  |
| :---: | :---: | :---: |
|  | 12:55-PDT | Saw: Blow |
|  | 19:55-GMT | Position: $102^{\circ}$ / 3088 m Direction: West; Behavior: Speed slow - Traveling • Breach |
|  | 13:02-PDT | Saw: Body |
|  | 20:02-GMT <br> starting to separate | Position: $103^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Breach |
|  | 13:11-PDT | Saw: Blow |
|  | 20:11-GMT | Position: 108 / 1922 m Direction: West; Behavior: Speed slow • Traveling • Breach • |
|  | 13:17-PDT | Saw: Blow |
|  | 20:17-GMT | Position: 108 / 1331 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:21-PDT | Saw: Body |
|  | 20:21-GMT | Position: 119 / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:26-PDT | Saw: Blow |
|  | 20:26-GMT | Position: 134 / 661 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:29-PDT | Saw: Breach |
|  | 20:29-GMT | Position: $140^{\circ} / 455 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Breach |
|  | upside-down |  |
|  | 13:31-PDT | Saw: Body |
|  | 20:31-GMT | Position: $182^{\circ} / 338 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Breach |
|  | 13:33-PDT | Saw: Body |
|  | 20:33-GMT | Position: $214^{\circ} / 388 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling • Breach |
|  | 13:36-PDT | Saw: Body |
|  | 20:36-GMT | Position: $242^{\circ}$ / 471 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:39-PDT | Saw: Body |
|  | 20:39-GMT | Position: $262^{\circ}$ / 550 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:42-PDT | Saw: Body |
|  | 20:42-GMT | Position: 280 / 661 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:44-PDT | Saw: Body Route past Holly: Inside |
|  | 20:44-GMT | Position: $278{ }^{\circ} / 661 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 24 | Quality: Poor <br> Beaufort: 2 | Total 2-1 Calf at sighting |
| Images: 6993-7028 | 14:08-PDT | Saw: Body |
|  | 21:08-GMT | Position: 174 / 300 m Direction: West; Behavior: Speed slow - Traveling |
|  | Did not see until right in front of Counter Point. Then, not very showy. Lost pair past Holly. |  |
|  | 14:09-PDT | Saw: Body |
|  | $\begin{aligned} & \text { 21:09-GMT } \\ & \text { calf } \end{aligned}$ | Position: $186^{\circ} / 300 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 14:10-PDT | Saw: Body |
|  | 21:10-GMT | Position: $207^{\circ}$ / 293 m Direction: West; Behavior: Speed slow • Traveling |
|  | 14:11-PDT | Saw: Body |
|  | 21:11-GMT | Position: $231^{\circ} / 338 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 14:12-PDT | Saw: Body Route past Holly: Inside |
|  | 21:12-GMT | Position: $236^{\circ} / 356 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 27 | Quality: Poor <br> Beaufort: 2 | Total 2-1 Calf at sighting |
| Images: 7032-7072 | 14:27-PDT | CueTip: Boat / Saw: Blow |
|  | 21:27-GMT | Position: $121^{\circ} / 883 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | Saw body off IV kelp. Pair caught attention of Guilty, which stopped right on kelp line (whales in kelp). Most likely this spooked pair which backtracked. Guilty eventually left. Whales emerged from kelp and stayed our of kelp past Counter Point. Barely surfaced. |  |
|  | 14:28-PDT | Saw: Blow |
|  | 21:28-GMT | Position: $121^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | likely spooked by Guilty, positioned on kelp line. |  |
|  | 14:31-PDT | Saw: Body |
|  | 21:31-GMT | Position: $119^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort



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|  | 10:36-PDT | Saw: Blow |
| :---: | :---: | :---: |
|  | 17:36-GMT | Position: 173 / 1020 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:38-PDT | Saw: Blow |
|  | 17:38-GMT | Position: 201 / 629 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:43-PDT | Saw: Blow Route past Holly: Inside |
|  | 17:43-GMT | Position: $264^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 07 | Quality: Fair <br> Beaufort: 0 | Total 2-1 Calf at sighting |
| Images: 7233-7253 | 10:09-PDT | Saw: Blow |
|  | 17:09-GMT | Position: 110 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | Spotted inside Campus Pt. ahead of S\#04. Traveled further off shore than most pairs. Off Counter Point moved close to kelp. |  |
|  | 10:12-PDT | Saw: Blow |
|  | 17:12-GMT | Position: 114 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:16-PDT | Saw: Blow |
|  | 17:16-GMT | Position: 115 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:21-PDT | Saw: Blow |
|  | 17:21-GMT | Position: $123^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 10:23-PDT | Saw: Blow |
|  | 17:23-GMT | Position: 130 / 1331 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:25-PDT | Saw: Blow |
|  | 17:25-GMT | Position: $137^{\circ} / 1208 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 10:29-PDT | Saw: Body |
|  | 17:29-GMT | Position: $160^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 10:33-PDT | Saw: Body |
|  | 17:33-GMT | Position: $208^{\circ} / 696$ m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:35-PDT | Saw: Blow |
|  | 17:35-GMT | Position: $223^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 10:37-PDT | Saw: Blow Route past Holly: Inside |
|  | 17:37-GMT | Position: $254^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 09 | Quality: Fair <br> Beaufort: 0 | Total 4-2 Calves at sighting |
| Images: 7285-7427 | 10:41-PDT | Saw: Body |
|  | 17:41-GMT | Position: 103 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | 2 pairs slightly separated. Saw off Campus Point. Joined outside kelp at Devereux. One mom has white spot on back. One pair came inside kelp at Counter Point. Made friends with Zc. Other pair (mom with spot) also came inside kelp at Counter Point after rolling in kelp. |  |
|  | 10:46-PDT | Saw: Blow |
|  | 17:46-GMT | Position: 107 $/ 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 10:49-PDT | Saw: Blow |
|  | 17:49-GMT | Position: 109 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 2 groups slightly separated |  |
|  | 10:53-PDT | Saw: Body |
|  | 17:53-GMT | Position: 111 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:55-PDT | Saw: Blow |
|  | 17:55-GMT | Position: 114 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | lead pair |  |
|  | 11:04-PDT | Saw: Blow |
|  | 18:04-GMT | Position: $116^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | pairs came together - with Zc |  |
|  | 11:05-PDT | Saw: Blow |
|  | $\begin{aligned} & \text { 18:05-GMT } \\ & \text { with Zc } \end{aligned}$ | Position: 118 / 1106 m Direction: West; Behavior: Speed slow • Traveling |

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|  | 09:50-PDT | Saw: Body |
| :---: | :---: | :---: |
|  | 16:50-GMT | Position: $126^{\circ}$ / 1208 m Direction: West; Behavior: Speed slow • Traveling |
|  | 09:53-PDT | Saw: Blow |
|  | 16:53-GMT | Position: $142^{\circ}$ / 946 m Direction: West; Behavior: Speed slow - Traveling |
|  | 09:57-PDT | Saw: Body |
|  | 16:57-GMT | Position: 177 / 661 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:00-PDT | Saw: Blow |
|  | 17:00-GMT | Position: 186 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:05-PDT | Saw: Blow Route past Holly: Inside |
|  | 17:05-GMT | Position: $245^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number <br> 04 <br> Images: 7506-7545 | Quality: Poor | Total 2-1 Calf at sighting |
|  | Beaufort: 4 |  |
|  | 10:14-PDT | Saw: Blow |
|  | 17:14-GMT | Position: 130 / 696 m Direction: West; Behavior: Speed slow • Traveling |
|  | Saw bodies in kelp approaching Counter Pt. Traveled inside kelp and switched back outside kelp near Holly. Did not surface often. |  |
|  | 10:16-PDT | Saw: Blow |
|  | 17:16-GMT | Position: $135^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 10:18-PDT | Saw: Body |
|  | 17:18-GMT | Position: $164^{\circ}$ / 412 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:21-PDT | Saw: Body |
|  | 17:21-GMT | Position: 195 / 356 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:23-PDT | Saw: Blow |
|  | 17:23-GMT | Position: $219^{\circ} / 412 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:26-PDT | Saw: Blow |
|  | 17:26-GMT | Position: $245^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 10:30-PDT | Saw: Blow Route past Holly: Inside |
|  | 17:30-GMT | Position: $274^{\circ}$ / 600 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 05 | Quality: Poor | Total 2-1 Calf at sighting |
|  | Beaufort: 4 |  |
| Images: 7576-7600 | 10:44-PDT | Saw: Blow |
|  | 17:44-GMT | Position: 106 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | Saw first blows off Campus Point. Traveled slowly along outside of kelp. Barely surfaced after passing Counter Point. |  |
|  | 10:50 -PDT | Saw: Blow |
|  | 17:50-GMT | Position: $111^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 10:56-PDT | Saw: Blow |
|  | 17:56-GMT | Position: $115^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 11:03-PDT | Saw: ni |
|  | 18:03-GMT | Position: $131^{\circ} / 1020 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 11:08-PDT | Saw: Blow |
|  | 18:08-GMT | Position: $169^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:09-PDT | Saw: Blow |
|  | 18:09-GMT | Position: 178 / 661 m Direction: West; Behavior: Speed slow - Traveling |
|  | 11:14-PDT | Saw: Blow Route past Holly: Inside |
|  | 18:14-GMT | Position: $232^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |

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Gray whale (northbound)
Daily Totals Whales 21 Calves 10


2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  | 11:11-PDT | Saw: Blow |
| :---: | :---: | :---: |
|  | 18:11-GMT | Position: $214^{\circ} / 314 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:12-PDT | Saw: Blow |
|  | 18:12-GMT | Position: $230^{\circ} / 356 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:13-PDT | Saw: Body |
|  | 18:13-GMT | Position: $234^{\circ} / 330 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:14-PDT | Saw: Body Route past Holly: Inside |
|  | 18:14-GMT | Position: $241^{\circ} / 330 \mathrm{~m}$ Direction: Circling; Behavior: Speed slow $\bullet$ Traveling • Spyhop |
|  | nursing; mi |  |
| Sighting Number 08 | Quality: Fair | Total 2-1 Calf at sighting |
|  | Beaufort: 3 |  |
| Images: 7646-7661 | 10:19-PDT | Saw: Blow |
|  | 17:19-GMT | Position: 101 / 3088 m Direction: West; Behavior: Speed slow • Traveling |
|  | Saw them behind S\#06 and this groups quickly moved past. Lots of snorkling. Not a lot od surfacing. |  |
|  | 10:22-PDT | Saw: Blow |
|  | 17:22-GMT | Position: 102 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:28-PDT | Saw: Blow |
|  | 17:28-GMT | Position: 108 / 2749 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:32-PDT | Saw: Blow |
|  | 17:32-GMT | Position: 106 / 1922 m Direction: Circling; Behavior: Speed slow |
|  | 10:33-PDT | Saw: Blow |
|  | 17:33-GMT | Position: 112 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:34-PDT | Saw: Blow |
|  | 17:34-GMT | Position: 114 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:41-PDT | Saw: Blow |
|  | 17:41-GMT | Position: $129^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:44-PDT | Saw: Blow |
|  | 17:44-GMT | Position: $152^{\circ}$ / 778 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 10:45-PDT | Saw: Blow |
|  | 17:45-GMT | Position: 158 / 696 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:47-PDT | Saw: Blow |
|  | 17:47-GMT | Position: 184 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  | 10:50-PDT | Saw: Blow |
|  | 17:50-GMT | Position: $208^{\circ}$ / 550 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:52-PDT | Saw: Blow Route past Holly: Inside |
|  | 17:52-GMT | Position: $241^{\circ}$ / 827 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 09 | Quality: Fair | Total 2-1 Calf at sighting |
|  | Beaufort: 3 |  |
|  | 10:40-PDT | Saw: Blow |
|  | 17:40-GMT | Position: 110 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | 10:54-PDT | Saw: Blow |
|  | 17:54-GMT | Position: 112 / 883 m Direction: West; Behavior: Speed slow - Traveling |
| Images: 7663-7908 | 11:03-PDT | Saw: Blow Route past Holly: Inside |
|  | 18:03-GMT | Position: 117 / 550 m Direction: West; Behavior: Speed slow - Traveling |
|  | JOINED S\#06-See Calf Sheet for S\#06-images combined |  |
| Sighting Number 12 | Quality: Fair Beaufort: 3 | Total 2-1 Calf at sighting |
| Images: 7910-7937 | 11:07-PDT | Saw: Blow |
|  | 18:07-GMT | Position: 109 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | First saw off of IV kelp. Very brief uptimes. Stopped to nurse on Sands side of Counter Point. Milk in water - Milk on calf head. |  |
|  | 11:13-PDT | Saw: Blow |
|  | 18:13-GMT | Position: 110 / 1922 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  |  |
| :---: | :---: | :---: |
|  | 11:25-PDT | Saw: Body |
|  | 18:25-GMT | Position: $127^{\circ}$ / 883 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:25-PDT | Saw: Blow |
|  | 18:25-GMT | Position: $129^{\circ}$ / 883 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:29-PDT | Saw: Blow |
|  | 18:29-GMT | Position: 149 / 600 m Direction: West; Behavior: Speed slow • Traveling |
|  | 11:30-PDT | Saw: Blow |
|  | 18:30-GMT | Position: $162^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:32-PDT | Saw: Blow |
|  | 18:32-GMT | Position: $169^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:34-PDT | Saw: Blow |
|  | 18:34-GMT | Position: $179^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:38-PDT | Saw: Blow |
|  | 18:38-GMT | Position: $214^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | milk in water |  |
|  | 11:39-PDT | Saw: Blow |
|  | 18:39-GMT | Position: $218^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:44-PDT | Saw: Body Route past Holly: Inside |
|  | 18:44-GMT | Position: $259^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 13 | Quality: Fair | Total 1 - 0 Calves at sighting |
|  | Beaufort: 3 |  |
|  | 11:50-PDT | Saw: Blow |
|  | 18:50-GMT | Position: $134^{\circ}$ / 778 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 11:55-PDT | Saw: Blow |
|  | 18:55-GMT | Position: 181 / 696 m Direction: West; Behavior: Speed slow - Traveling |
|  | 12:01-PDT | Saw: Body Route past Holly: Inside |
|  | 19:01-GMT | Position: $237^{\circ} / 913 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 15 | Quality: Fair | Total 2-1 Calf at sighting |
|  | Beaufort: 3 |  |
| Images: 7939-7981 | 12:04-PDT | CueTip: Phone / Saw: Blow |
|  | 19:04-GMT | Position: $102^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Traveled slowly along kelp. Long downtimes; brief, but active, uptimes. First sighted off Campus Point with cue-tip from off-duty Counter. |  |
|  | 12:11-PDT | Saw: Blow |
|  | 19:11-GMT | Position: 110 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:17-PDT | Saw: Blow |
|  | 19:17-GMT | Position: $113^{\circ} / 1922 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:29-PDT | Saw: Blow |
|  | 19:29-GMT | Position: $127^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:36-PDT | Saw: Blow |
|  | 19:36-GMT | Position: $156^{\circ}$ / 778 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 12:44-PDT | Saw: Body Route past Holly: Inside |
|  | 19:44-GMT | Position: $213^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 16 | Quality: Fair <br> Beaufort: 3 | Total 4-2 Calves at sighting |
| Images: 7990-8078 | 12:11-PDT | Saw: Blow |
|  | 19:11-GMT | Position: 101 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  | Traveled steadily along and in kelp. Surface fairly often. Rolling observed as they approached us. Potential nursing-stop in kelp off Counter Pt. Long downtimes. Entered kelp off Devereux side of Counter Point, exited through Sands kelp. |  |
|  | 12:14-PDT | Saw: Blow |
|  | 19:14-GMT | Position: $104^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 12:18-PDT | Saw: Blow |
|  | 19:18-GMT | Position: $105^{\circ}$ / 2260 m Direction: West; Behavior: Speed slow • Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort



2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  | 11:43-PDT | Saw: Blow |
| :---: | :---: | :---: |
|  | 18:43-GMT | Position: $224^{\circ} / 489 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 11:48-PDT | Saw: Blow Route past Holly: Inside |
|  | 18:48-GMT | Position: $264^{\circ} / 946 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 16 | Quality: Poor Beaufort: 1 | Total 2-1 Calf at sighting |
| Images: 8164-8200 | 12:54-PDT | Saw: Body |
|  | 19:54-GMT | Position: 120 / 1331 m Direction: West; Behavior: Speed slow • Traveling |
|  | Saw bodies outside kelp off Devereux. Surfaced occasionaly, traveling outside kelp. |  |
|  | 12:56-PDT | Saw: Body |
|  | 19:56-GMT | Position: $124^{\circ} / 1331 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:02-PDT | Saw: Body |
|  | 20:02-GMT | Position: $147^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:03-PDT | Saw: Body |
|  | 20:03-GMT | Position: $149^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:04-PDT | Saw: Body |
|  | 20:04-GMT | Position: $155^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:08-PDT | Saw: Body |
|  | 20:08-GMT | Position: $197^{\circ}$ / 528 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:09-PDT | Saw: Body |
|  | 20:09-GMT | Position: $201^{\circ}$ / 508 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:10-PDT | Saw: Body |
|  | 20:10-GMT | Position: $206^{\circ} / 508 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:11-PDT | Saw: Body |
|  | 20:11-GMT | Position: $212^{\circ} / 574$ m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:14-PDT | Saw: Body |
|  | 20:14-GMT | Position: $247^{\circ} / 661 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:16-PDT | Saw: Body Route past Holly: Inside |
|  | 20:16-GMT | Position: $254{ }^{\circ} / 696 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 17 <br> Images: 8202-8255 | Quality: Poor | Total 2-1 Calf at sighting |
|  | Beaufort: 1 |  |
|  | 13:18-PDT | Saw: Blow |
|  | 20:18-GMT | Position: 109 / 1922 m Direction: West; Behavior: Speed slow • Traveling |
|  | Saw off Campus Pt. Long downtimes; several breaths per breathing cycle. Off Counter Point entered kelp; exited off Sands. Moved relatively quickly with cow seeming to "drag" calf. |  |
|  | 13:23-PDT | Saw: Blow |
|  | 20:23-GMT | Position: $111^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:24-PDT | Saw: Body |
|  | 20:24-GMT | Position: $113^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:25-PDT | Saw: Blow |
|  | 20:25-GMT | Position: $115^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:29-PDT | Saw: Blow |
|  | 20:29-GMT | Position: 122 / 696 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:30-PDT | Saw: Blow |
|  | 20:30-GMT | Position: $124^{\circ}$ / 696 m Direction: West; Behavior: Speed slow • Traveling |
|  | 12:31-PDT | Saw: Body |
|  | 19:31-GMT | Position: 138 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:33-PDT | Saw: Blow |
|  | 20:33-GMT | Position: $149^{\circ} / 550 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | in kelp |  |
|  | 13:35-PDT | Saw: Blow |
|  | 20:35-GMT | Position: 149 / 471 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |



2014 Gray Whales (northbound) Sighting + Tracking, On-Effort



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2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


|  | 11:08-PDT | Saw: Blow Route past Holly: Inside |
| :---: | :---: | :---: |
|  | 18:08-GMT | Position: $280^{\circ}$ / 735 m Direction: West; Behavior: Speed slow - Traveling |
| Sighting Number 13 | Quality: Poor | Total 2-1 Calf at sighting |
|  | Beaufort: 2 |  |
| Images: 9558-9578 | 13:11-PDT | Saw: Blow |
|  | 20:11-GMT | Position: $108^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | Blows off Campus Pt. Cow has white spots on dorsal ridge. Came inside kelp in front of Counter Point. Cow fluked near Stick. |  |
|  | 13:13-PDT | Saw: Blow |
|  | 20:13-GMT | Position: $109^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:16-PDT | Saw: Blow |
|  | 20:16-GMT | Position: $109^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 13:17-PDT | Saw: Blow |
|  | 20:17-GMT | Position: $109^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:20-PDT | Saw: Blow |
|  | 20:20-GMT | Position: $109^{\circ}$ / 1483 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:23-PDT | Saw: Blow |
|  | 20:23-GMT | Position: $117^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:25-PDT | Saw: Blow |
|  | 20:25-GMT | Position: $124^{\circ}$ / 778 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:27-PDT | Saw: Body |
|  | 20:27-GMT | Position: $134^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  | 13:29-PDT | Saw: Blow |
|  | 20:29-GMT | Position: 157 / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:31-PDT | Saw: Blow |
|  | 20:31-GMT | Position: $170^{\circ}$ / 471 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:32-PDT | Saw: Body |
|  | 20:32-GMT | Position: 185 / 412 m Direction: West; Behavior: Speed slow - Traveling |
|  | 13:34-PDT | Saw: Blow |
|  | 20:34-GMT | Position: $215^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow • Traveling |
|  | 13:38-PDT | Saw: Blow |
|  | 20:38-GMT | Position: $250^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 13:40-PDT | Saw: Body |
|  | 20:40-GMT | Position: $267^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | calf head |  |
|  | 13:42-PDT | Saw: Blow |
|  | 20:42-GMT | Position: $278^{\circ}$ / 827 m Direction: West; Behavior: Speed slow $\bullet$ Traveling $\bullet$ Fluke |
|  | 13:45-PDT | Saw: Blow Route past Holly: Inside |
|  | 20:45-GMT | Position: $290^{\circ}$ / 3528 m Direction: West; Behavior: Speed slow • Traveling |
| Sighting Number 24 | Quality: Poor | Total 2-1 Calf at sighting |
|  | Beaufort: 3 |  |
| Images: 9591-9655 | 15:36-PDT | Saw: Blow |
|  | 22:36-GMT | Position: 107 / 2260 m Direction: West; Behavior: Speed slow • Traveling |
|  | Blows at Campus Pt. Stealthy pair, barely surfaced at first. Went other way (not indicated in data) in front of Counter Pt briefly. Did not surface again until Stick. |  |
|  | 15:43-PDT | Saw: Blow |
|  | 22:43-GMT | Position: $107^{\circ} / 1483 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  | 15:52-PDT | Saw: Body |
|  | 22:52-GMT | Position: $121^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:55-PDT | Saw: Body |
|  | 22:55-GMT | Position: $141^{\circ} / 600 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |
|  | 15:59-PDT | Saw: Body |
|  | 22:59-GMT | Position: $172^{\circ} / 400 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |

2014 Gray Whales (northbound) Sighting + Tracking, On-Effort


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2014 Gray Whales (northbound) Sighting + Tracking, On-Effort

|  |  | 15:53-PDT | Saw: Blow |
| :---: | :---: | :---: | :---: |
|  |  | 22:53-GMT | Position: 107 / 2749 m Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:55-PDT | Saw: Blow |
|  |  | 22:55-GMT | Position: $109^{\circ} / 2749 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
|  |  | 15:58-PDT | Saw: Blow |
|  |  | 22:58-GMT | Position: 110 / 2749 m Direction: West; Behavior: Speed slow • Traveling • Rolling |
|  |  | 16:00-PDT | Saw: Blow |
|  |  | 23:00-GMT | Position: $110^{\circ} / 2260 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:05-PDT | Saw: Blow |
|  |  | 23:05-GMT | Position: 110 / 1922 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:07-PDT | Saw: Body |
|  |  | 23:07-GMT | Position: $112^{\circ} / 1674 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:10-PDT | Saw: Blow |
|  |  | 23:10-GMT | Position: $113^{\circ}$ / 1403 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:13-PDT | Saw: Body |
|  |  | 23:13-GMT | Position: $117^{\circ} / 1208 \mathrm{~m}$ Direction: West; Behavior: Speed slow Traveling $^{\text {a }}$ |
|  |  | 16:16-PDT | Saw: Blow |
|  |  | 23:16-GMT | Position: $126^{\circ}$ / 883 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:18-PDT | Saw: Blow |
|  |  | 23:18-GMT | Position: $134^{\circ} / 778 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:19-PDT | Saw: Blow |
|  |  | 23:19-GMT | Position: 139 / 696 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:22-PDT | Saw: Body |
|  |  | 23:22-GMT | Position: 157 / 629 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:27-PDT | Saw: Body |
|  |  | 23:27-GMT | Position: 193 / 600 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:29-PDT | Saw: Body |
|  |  | 23:29-GMT | Position: $202^{\circ}$ / 600 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:31-PDT | Saw: Body |
|  |  | 23:31-GMT | Position: $229^{\circ}$ / 574 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:33-PDT | Saw: Body |
|  |  | 23:33-GMT | Position: $246^{\circ} / 661 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 16:35-PDT | Saw: Body |
|  |  | 23:35-GMT | Position: $258{ }^{\circ}$ / 735 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:39-PDT | Saw: Body |
|  |  | 23:39-GMT | Position: $275{ }^{\circ}$ / 946 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 16:41-PDT | Saw: Blow Route past Holly: Inside |
|  |  | 23:41-GMT | Position: $282^{\circ}$ / 1106 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
| May 25 | Day 105 of 107 | Gray whale (n | nd) $\quad$ Daily Totals Whales 3 Calves 1 |
|  | Sighting Number 08 | Quality: Fair <br> Beaufort: 3 | Total 1 - 0 Calves at sighting |
|  | Images: 0495-0519 | 11:23-PDT | Saw: Blow |
|  |  | 18:23-GMT <br> small juvenile | Position: 114 / 1331 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 11:26-PDT | Saw: Blow |
|  |  | 18:26-GMT | Position: $122^{\circ} / 1208 \mathrm{~m}$ Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 11:31-PDT | Saw: Blow |
|  |  | 18:31-GMT | Position: 143 / 489 m Direction: West; Behavior: Speed slow $\bullet$ Traveling |
|  |  | 11:36-PDT | Saw: Blow |
|  |  | 18:36-GMT | Position: 209 / 400 m Direction: West; Behavior: Speed slow - Traveling |
|  |  | 11:41-PDT | Saw: Blow |
|  |  | 18:41-GMT | Position: $248^{\circ} / 735 \mathrm{~m}$ Direction: West; Behavior: Speed slow - Traveling |

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|  | 11:47-PDT Saw: Blow <br>  18:47-GMT <br> Outside Stick  | Position: $264^{\circ} / 1106 \mathrm{~m}$ Direction: West; Behavior: Speed slow • Traveling |
| :--- | :--- | :--- |


[^0]:    Gray Whales Count is a nonprofit 501(c)(3) corporation for research and education

