Tour d’Horizon 2023 and multi-annual TdH trends

1. Belgium compiled the results of TdH flights of 2023 in a ‘Draft Report on Tour d’Horizon 2023’ (see Annex 1). The TdH flight programme for 2023 (cf. BA Joint Action Programme) was scheduled as follows:

January/February:………..Denmark

March/April:…………………Germany

May/June:…………………….Sweden  
July/August:………………….Belgium

August/September:………United Kingdom  
September/October:…….The Netherlands

November/December:….Norway

Each of the above CPs was requested by the BA Secretariat prior to OTSOPA 24 to submit their aerial surveillance data for 2023, including the TdH23 mission data. The BA Secretariat subsequently sent the submitted TdH data to Belgium in early April 2024. Not all flight data was sent to the BA Secretariat for compilation before this deadline. DE provided some missing data before the EAP meeting on 18/04/2024 and UK provided their TdH23 data after the EAP meeting. Sweden did not provide TdH23 data through the BA annual reporting procedure, but this info was retrieved from their national TdH report. The Netherlands reported they did not perform a TdH mission in 2023 due to maintenance issues. Belgium was furthermore informed that also Denmark did not perform a TdH in 2023 due to an administrative error.

1. As a result, only 5 different TdH missions were carried out by – in chronological order: Germany, Sweden, Belgium, The United Kingdom and Norway – resulting in a joint surveillance effort which is in line with the BA joint action programme.

Remarks and conclusions

***TdH23 results and issues***

1. The total number of spill detections made during TdH campaigns in 2023 amounts to 40 – of which 37 were identified as oil (as added in the multi-annual overview table below) and 3 as ‘other’ substances. No ‘unknown’ detections were made. 35 oil detections were found connected to offshore installations. 1 detection was connected to an oil rig but was identified as ‘other’. None of the flight detections were verifications (or at least reported as such) following receipt of CSN SAT alerts. All detections were systematically reported post-flight by email to the national focal points concerned.
2. As in previous years, a large variation in n° of detections per TdH mission can be observed between countries. This is not only due to variable weather conditions. It is probably also due to differences in flight patterns/approaches. Flight routes and patterns could be optimised to check as much platforms as possible, not only by SLAR but also by means of visual verification.
3. The joint effort of CPs in performing TdH missions seems to be decreasing in recent years. It seems that difficulties remain to adapt the regional flight planning in case a Contracting Party faces organisational or other (e.g. maintenance) issues with their TdH mission.
4. At OTSOPA 24, the Netherlands noted that they had a decrease in hours due to the Covid 19 pandemic and delivery of new aircraft in recent years but did fly TdH missions in April 2024 and intended to resume to their normal flight hours. The Secretariat furthermore noted that the TdH reports were shared with the OSPAR’s OIC[[1]](#footnote-1) and they found the information of interest and it is being used to inform discussions about the amount of oil permitted in produced water discharges.
5. Belgium thanks the CPs that send us their detailed TDH mission report!

***Multi-annual trends in TdH oil detections***

1. From the TdH 2023 report and the Table 1 and Figure 1 below, which summarize the confirmed oil detections made during all TdH campaigns in the framework of the Bonn Agreement since 2006[[2]](#footnote-2), the following can be concluded:

* The TdH23 campaigns jointly resulted in 37 oil detections, of which 35 were associated to an offshore installation, and 6 oil detections consisted of major oil volumes (min. oil vol. > 1 m³). These are quite average results when comparing the 2023 data with the other annual data in the period 1999-2023.
* Strong annual fluctuations can be found in annual TdH detections, and the lack of a clear trend in number of TdH detections over the last 24 years. This seems contrary to, for example, the significantly decreasing trend in oil pollution from ships. But it should be nuanced that such a comparison is difficult to make, since most TdH detections are assessed to be permitted OIW discharges, whilst oil spills detected in the wake of a ship are generally the result of an illegal discharge (violation of MARPOL Annex I discharge standards).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | N° TdH flight hours | N° of confirmed oil detections | N° of confirmed oil detections connected to offshore installations | N° of ‘major’ oil detections (> 1 m³ min.vol.) |
| **2023** | 70.58 | 37 | 35 | 6 |
| 2022 | 60.08 | 25 | 22 | 2 |
| 2021 | 61.47 | 32 | 31 | 4 |
| 2020 | 55.88 | 27 | 25 | 2 |
| 2019 | 80.82 | 36 | 33 | 4 |
| 2018 | 97.83 | 33 | 32 | 5 |
| 2017 | 101.95 | 54 | 48 | 9 |
| 2016 | 86.75 | 14 | 14 | 3 |
| 2015 | 42.58 | 4 | 4 | 1 |
| 2014 | 99.3 | 58 | 54 | 10 |
| 2013 | 98.88 | 36 | 30 | 4 |
| 2012 | 69.57 | 16 | 13 | 1 |
| 2011 | 50.64 | 7 | 4 | 1 |
| 2010 | 82.19 | 45 | 39 | 7 |
| 2009 | 85.45 | 23 | 21 | 1 |
| 2008 | 56.39 | 34 | 25 | 4 |
| 2007 | 38.27 | 19 | 15 | 6 |
| 2006 | 73.11 | 24 | 21 | 3 |
| 2005 | 50.71 | 17\* | 3 | *(-) \** |
| 2004 | 82.67 | *-50* | 40 | *(-)* |
| 2003 | 50.08 | *-23* | 6 | *(-)* |
| 2002 | 81.82 | *-33* | 23 | *(-)* |
| 2001 | 63.68 | *-60* | 51 | *(-)* |
| 2000 | 84.3 | *-59* | 49 | *(-)* |
| 1999 | 81.3 | *-34* | 24 | *(-)* |

**Table 1 – Multi-annual overview of joint TdH flight effort and confirmed oil detections for period 1999-2023. \***   
\*For the period 1999-05, TdH data have been derived from the general TdH table in the BA annual surveillance reports, which only reflect total number of detections (oil + other substances + unknowns) but not the total number of ‘major’ oil detections (>1 m³min.vol.) – therefore these data are still missing for these earlier years.

**Fig. 1 – Multi-annual trends in confirmed oil detections associated with offshore installations, as observed during joint TdH campaigns for the period 1999-2023.  
Report on Tour de Horizon flights carried out during 2023**

**Introduction**

The Tour de Horizon (TdH) flights for 2023 were flown as follows: April: Germany; June: Sweden; July: Belgium and November: The United Kingdom and Norway. The flights took place over 11 flight days between the 3th of April and the 21st of November 2023, more specifically:

* 03-05 April 2023 (DE);
* 06 June 2023 (SE);
* 03-07 July 2023 (BE);
* 07-10 November (UK);
* 20-21 November 2023 (NO).

**Detections**

* A total of 40 detections were made during the 5 TdH ‘23 campaigns (26 in British area, 10 in Norwegian area, 3 in Dutch area and 1 in the Danish area). 37 detections were identified as mineral oil. 3 detections have been categorized as ‘other substance’.
* 36 detections were found directly associated with offshore platforms (25 in UK area, 10 in NO area and 1 in DK area), 35 of them consisted of mineral oil, one were categorized as ‘other substance’. The source of pollution of 4 detections consisting of oil could not be established.
* Of the 37 mineral oil detections, minimum 6 detections (~min. vol.) and maximum 21 detections (~max. vol.) consisted of major oil volumes - i.e. volume of more than 1 m³. A more detailed overview of the number of oil detections per volume category is given below.

|  |  |  |
| --- | --- | --- |
| **Volume category** | **N° of oil slicks**  **(min. vol.)** | **N° of oil slicks**  **(max. vol.)** |
| **10-100 m³** | 1 | 5 |
| **1-10 m³** | 5 | 16 |
| **0.5-1 m³** | 5 | 0 |
| **0.1-0.5 m³** | 10 | 8 |
| **< 0.1 m³** | 16 | 8 |

**CSN SAT support**

As in previous years, CSN satellite surveillance support was made available for the TdH23 missions, through a direct request procedure between TdH aircrew and EMSA. However, of the 30 TdH detections made in 2023 by Belgium, none were reported as verifications of an initial CSN satellite detection alert. Germany and Sweden, who also called upon CSN SAT support for their TdH campaign, have not reported any TdH detections as verifications of CSN alerts. More details on the CSN support to TdH can be found in the document ‘CleanSeaNet Statistics 2023’ by EMSA.

**Flight routes**

Five flight maps have also been added to this report. The maps visualize the flight routes of the performed TdH23 missions and the degree of coverage of the central part of the North Sea where most offshore installations are located. They also show the locations of the detections made during the various TdH23 campaigns.

**Detection investigation**

The overview of the national inspectors’ detection investigation is added on pp.8-10 of the TdH 2023 report. This detection investigation summary shows that of the detections associated with offshore platforms, the vast majority were reported as normal produced water discharges. The major oil slick observed by Belgium on 06/07/2023 originating from the TRITON platform (UK waters) was the only slick confirmed to exceed the legal limit in permitted oil in produced water stream.

**TOUR D’HORIZON 2023 RESULTS**

***1. SUMMARY OF RESULTS***

**Summary of data relating to Tour d’Horizon (TdH) flights during 2023**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **No. of flights** | **No. of flight hours** | | | **No. of detections** | | | **No of detections identified as oil** | **Estimated volume m3** | **No of ‘other substance’ detections** | **No of ‘unknown’ detections** | **No. of sources/polluters** | | | | **Remarks** |
| **Daylight** | **Darkness** | **Sum** | **Daylight** | **Darkness** | **Sum** | **Rigs** | **Ships** | **(Unknown)** | **Total** |
| Belgium | 6 | 22:40 | 00:00 | 22:40 | 30 | 0 | 30 | 30 | 48.53 | 0 | 0 | 28 | 0 | 2 | 30 |  |
| Denmark | 0 | 00:00 | 00:00 | 00:00 | 0 | 0 | 0 | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 1) |
| Germany | 4 | 14:05 | 00:00 | 14:05 | 3 | 0 | 3 | 0 | - | 3 | 0 | 1 | 0 | 2 | 3 |  |
| Netherlands | 0 | 00:00 | 00:00 | 00:00 | 0 | 0 | 0 | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 2) |
| Norway | 2 | 08:55 | 00:00 | 08:55 | 0 | 0 | 0 | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 3) |
| Sweden | 1 | 04:20 | 00:00 | 04:20 | 0 | 0 | 0 | 0 | 0.00 | 0 | 0 | 0 | 0 | 0 | 0 | 4) |
| UK | 7 | 20:35 | 00:00 | 20:35 | 7 | 0 | 7 | 7 | 0.81 | 0 | 0 | 7 | 0 | 0 | 7 |  |
| **Total** | **20** | **70:35** | **0:00** | **70:35** | **40** | **0** | **40** | **37** | **49.34** | **3** | **0** | **36** | **0** | **4** | **40** |  |

1) DK did not perform a TdH due to an administrative error.   
2) NL did not perform a TdH mission in 2023 due to technical reasons.  
3) No detections were made during the NO TdH campaign Due to bad weather conditions (heavy winds), the flight on the last day of the campaign was cancelled (22/11/2023).  
4) No detections were made during the SE TdH campaign. Due to technical issues the campaign was stopped after 1 flight.

***2. OVERVIEW OF DETECTIONS/OBSERVATIONS PER CONTRACTING PARTY***

**2.1 Germany: 03-05 April 2023**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Date (dd.mm.yy)** | **Time (UTC)** | **Position (dec. degr.)** | | **CP Area** | **Min. Quan.(m³)** | **Max. Quan.(m³)** | **Source ID** | **Pollution type** |
| **N** | **E/W** |
| 1 | 03/04/2023 | 09:55:00 | 52.7583 | 3.2433 | NL | - | - | - | OTH |
| 2 | 03/04/2023 | 10:10:00 | 52.8533 | 3.2208 | NL | - | - | - | OTH |
| 3 | 05/04/2023 | 10:04:00 | 55.5483 | 5.1700 | DK | - | - | NOBLE REACHER | OTH |

**2.2 Sweden: 06 June 2023**

No detections were made during the SE TdH campaign. Due to technical issues the campaign was stopped after 1 flight.

**2.3 BELGIUM: 03-07 July 2023.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Date (dd.mm.yy)** | **Time (UTC)** | **Position (dec. degr.)** | | **CP Area** | **Min. Quan.(m³)** | **Max. Quan.(m³)** | **Source ID** | **Pollution type** |
| **N** | **E/W** |
| 1 | 04/07/2023 | 11:15 | 59.1650 | 2.4883 | NO | 0.16 | 1.71 | OSSEBERG C | OIL |
| 2 | 04/07/2023 | 09:00 | 60.8050 | 1.4528 | NO | 0.01 | 0.09 | GRANE | OIL |
| 3 | 04/07/2023 | 11:23 | 60.8572 | 1.4653 | NO | 0.21 | 2.35 | BRAGE | OIL |
| 4 | 04/07/2023 | 10:45 | 60.6042 | 2.7719 | UK | 0.01 | 0.09 | NINIAN South | OIL |
| 5 | 04/07/2023 | 10:50 | 60.5422 | 3.0469 | UK | 0.87 | 3.63 | NINIAN Central | OIL |
| 6 | 05/07/2023 | 10:36 | 60.7733 | 3.5025 | UK | 1.87 | 11.05 | CORMORANT N | OIL |
| 7 | 05/07/2023 | 08:47 | 60.8858 | 3.6083 | NO | 0.12 | 1.29 | TROLL C | OIL |
| 8 | 05/07/2023 | 08:39 | 61.1769 | 2.1847 | NO | 4.54 | 26.58 | TROLL B | OIL |
| 9 | 05/07/2023 | 09:37 | 61.1886 | 2.1717 | NO | 0.00 | 0.01 | GULLFAKS A | OIL |
| 10 | 05/07/2023 | 09:50 | 61.2083 | 1.8267 | NO | 0.49 | 4.89 | STRATFJORD B | OIL |
| 11 | 05/07/2023 | 09:53 | 61.2550 | 1.8619 | NO | 0.11 | 1.07 | STRATFJORD A | OIL |
| 12 | 05/07/2023 | 10:01 | 61.4478 | 2.1506 | NO | 0.60 | 6.06 | SNORRE A | OIL |
| 13 | 05/07/2023 | 10:16 | 61.6300 | 1.3156 | UK | 0.01 | 0.08 | MAGNUS | OIL |
| 14 | 05/07/2023 | 09:34 | 61.2372 | 1.1247 | NO | 0.44 | 4.39 | GULLFAKS B | OIL |
| 15 | 05/07/2023 | 10:42 | 61.0939 | 1.0653 | UK | 0.41 | 2.66 | CORMORANT A | OIL |
| 16 | 06/07/2023 | 11:06 | 58.4467 | 0.2500 | UK | 0.02 | 0.17 | FORTIES | OIL |
| 17 | 06/07/2023 | 11:06 | 58.4606 | 0.2333 | UK | 0.06 | 0.49 | FORTIES C | OIL |
| 18 | 06/07/2023 | 11:06 | 58.2883 | 0.1833 | UK | 16.87 | 92.87 | FORTIES A | OIL |
| 19 | 06/07/2023 | 11:08 | 58.3589 | 0.8500 | UK | 0.01 | 0.05 | FORTIES D | OIL |
| 20 | 06/07/2023 | 11:37 | 58.0561 | 1.0742 | UK | 0.03 | 0.25 | ANNASURIA | OIL |
| 21 | 06/07/2023 | 11:41 | 57.7481 | 0.9000 | UK | 4.24 | 9.96 | TRITON | OIL |
| 22 | 06/07/2023 | 11:43 | 57.7272 | 0.8333 | UK | 0.01 | 0.07 | GANNET A | OIL |
| 23 | 06/07/2023 | 09:56 | 57.7289 | 0.9667 W | UK | 8.57 | 50.23 | CLAYMORE | OIL |
| 24 | 06/07/2023 | 10:19 | 57.7214 | 0.9000 | UK | 0.75 | 7.38 | SCOTT | OIL |
| 25 | 06/07/2023 | 10:09 | 57.2553 | 0.8000 | UK | 7.13 | 34.71 | PIPER B | OIL |
| 26 | 06/07/2023 | 10:51 | 57.0847 | 0.8833 | UK | 0.63 | 6.34 | NORTHERN ALBA | OIL |
| 27 | 06/07/2023 | 10:37 | 57.1836 | 0.9833 | UK | 0.06 | 0.45 | GLOBAL PRODUCER | OIL |
| 28 | 07/07/2023 | 10:53 | 53.0881 | 2.1281 | UK | 0.02 | 0.22 | SHELL LEMAN A | OIL |
| 29 | 07/07/2023 | 11:39 | 52.4503 | 2.9233 | NL | 0.12 | 1.28 | - | OIL |
| 30 | 07/07/2023 | 11:27 | 52.2658 | 3.0019 | UK | 0.14 | 1.40 | - | OIL |

**2.4 THE UNITED KINGDOM: 07-10 November 2023.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Date (dd.mm.yy)** | **Time (UTC)** | **Position (dec. degr.)** | | **CP Area** | **Min. Quan.(m³)** | **Max. Quan.(m³)** | **Source ID** | **Pollution type** |
| **N** | **E/W** |
| 1 | 07/11/2023 | 14:20 | 57.3812 | 0.9579 | UK | 0.14 | 1.35 | FORTIES A | OIL |
| 2 | 07/11/2023 | 14:24 | 57.7348 | 0.9140 | UK | 0.02 | 0.20 | FORTIES D | OIL |
| 3 | 07/11/2023 | 14:28 | 57.7416 | 0.8240 | UK | 0.05 | 0.46 | FORTIES C | OIL |
| 4 | 08/11/2023 | 09:15 | 58.4567 | -0.2479 | UK | 0.02 | 0.17 | CLAYMORE | OIL |
| 5 | 08/11/2023 | 09:16 | 58.4621 | -0.2723 | UK | 0.00 | 0.03 | CLAYMORE | OIL |
| 6 | 08/11/2023 | 09:28 | 58.5025 | 0.2339 | UK | 0.58 | 5.63 | PIPER B | OIL |
| 7 | 08/11/2023 | 09:31 | 58.5491 | 0.0845 | UK | 0.00 | 0.01 | PIPER B | OIL |

**2.5 NORWAY: 20-21 November 2023.**

No detections were made during the NO TdH campaign. Due to bad weather conditions (heavy winds), the flight on the last day of the campaign was cancelled (22/11/2023).

**TOUR D’HORIZON 2023 – DETECTION INVESTIGATION SUMMARY**

**GERMANY:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date (ddmmyy)** | **Time (UTC)** | **Platform** | **Reported  quantity (m³)** | | **Government inspectors assessment** |
| **Min.** | **Max.** |
| 05/04/2023 | 10:04 | NOBLE REACHER | - | - | DK Government Inspector assessment: DEPA has got information from the operator, stating that while the Oil-in-Water has been somewhat high, there are no accidents or leakage of oil. The OiW is within the legal and acceptable range. It is likely that calm weather has contributed to the spreading of oil. DEPA takes note of the information. |

**BELGIUM:**

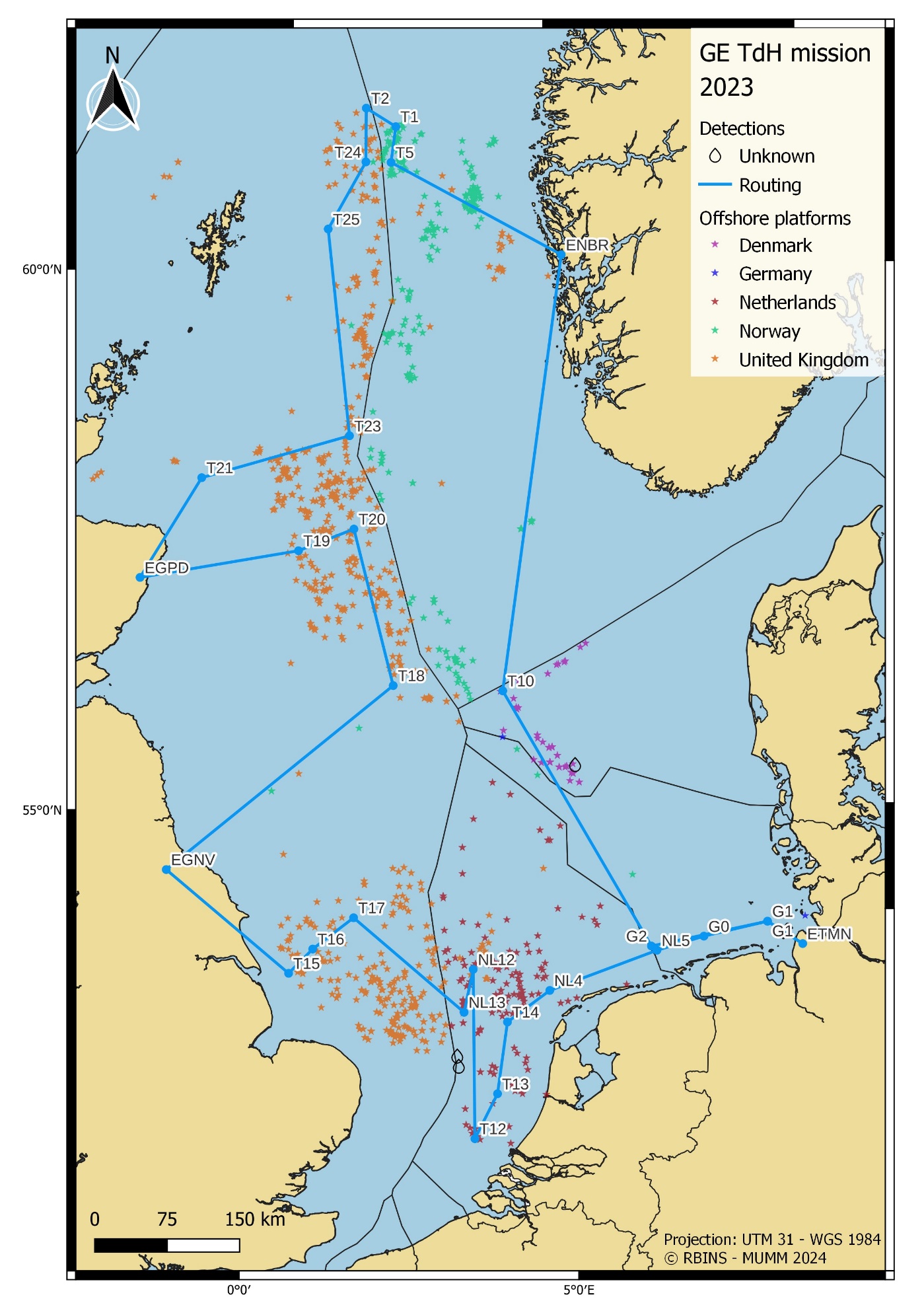
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date (ddmmyy)** | **Time (UTC)** | **Platform** | **Reported quantity (m³)** | | **Government inspectors assessment** |
| **Min.** | **Max.** |
| 04/07/2023 | 11:15 | OSSEBERG C | 0.16 | 1.71 | NO Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. |
| 04/07/2023 | 09:00 | GRANE | 0.01 | 0.09 | NO Government Inspector assessment: Oil in produced water, higher values than normal during nighttime, within legal limits. |
| 04/07/2023 | 11:23 | BRAGE | 0.21 | 2.35 | NO Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. |
| 04/07/2023 | 10:45 | NINIAN South | 0.01 | 0.09 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limit. Additional sample taken after call from HMCG, within legal limit. |
| 04/07/2023 | 10:50 | NINIAN Central | 0.87 | 3.63 | UK Government Inspector assessment: Oil in produced water, normal conditions within legal limits |
| 05/07/2023 | 10:36 | CORMORANT N | 1.87 | 11.05 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. No produced water discharges through additional discharge routes at time of observation. Operator investigation concluded observed oil on sea surface to be due to flat sea conditions. Reduced OiW output as one stream offline may have exacerbated appearance of surface oiling. |
| 05/07/2023 | 08:47 | TROLL C | 0.12 | 1.29 | NO Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. |
| 05/07/2023 | 08:39 | TROLL B | 4.54 | 26.58 | NO Government Inspector assessment: Oil in produced water, normal conditions, within legal limits.[[3]](#footnote-3) |
| 05/07/2023 | 09:37 | GULLFAKS A | 0.00 | 0.01 | NO Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. |
| 05/07/2023 | 09:50 | STRATFJORD B | 0.49 | 4.89 | NO Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. |
| 05/07/2023 | 09:53 | STRATFJORD A | 0.11 | 1.07 | NO Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. |
| 05/07/2023 | 10:01 | SNORRE A | 0.60 | 6.06 | NO Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. |
| 05/07/2023 | 10:16 | MAGNUS | 0.01 | 0.08 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. Ongoing drilling operations not in discharge phase, all skipped. |
| 05/07/2023 | 09:34 | GULLFAKS B | 0.44 | 4.39 | NO Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. |
| 05/07/2023 | 10:42 | CORMORANT A | 0.41 | 2.66 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits, permitted chemical treatment operation ongoing which may have caused a more visible surface oiling during calm weather conditions. |
| 06/07/2023 | 11:06 | FORTIES | 0.02 | 0.17 | UK Government Inspector assessment: Forties Bravo. Oil in produced water, normal conditions, within legal limits. Sandwashing online on 5th July may have increased visibility of surface oil. |
| 06/07/2023 | 11:06 | FORTIES C | 0.06 | 0.49 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. Sandwashing sweep carried out on 3rd July, and well brought online following scale squeeze on 6th July, which may have increased the visibility of the surface oil. |
| 06/07/2023 | 11:06 | FORTIES A | 16.87 | 92.87 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. |
| 06/07/2023 | 11:08 | FORTIES D | 0.01 | 0.05 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. Sand washing online 3rd July & 5th July, well brought online on 4th & 6th July and chemical rates adjusted on 3rd July which may have increased visibility of surface oil. |
| 06/07/2023 | 11:37 | ANASURIA | 0.03 | 0.25 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. Produced water & slops discharges to sea during this period within legal limits, extremely calm and sunny weather conditions may have increased visibility of surface oil. |
| 06/07/2023 | 11:41 | TRITON | 4.24 | 9.96 | UK Government Inspector assessment: Exceedance of legal limit in permitted oil in produced water stream, notified to the Department via IRS/2023/3018/OPPC on 03/07/2023. High oil in water concentration observed in slops during flowback and dewatering from 2023 Bittern pigging campaign causing process upset by reducing separation temperatures. Biociding operations also ongoing. Remedial steps taken and discharges returned within legal limits by 22:50 on 03/07/2023. |
| 06/07/2023 | 11:43 | GANNET A | 0.01 | 0.07 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. No operations which would result in enhanced discharge or oil release. |
| 06/07/2023 | 09:56 | CLAYMORE | 8.57 | 50.23 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. |
| 06/07/2023 | 10:19 | SCOTT | 0.75 | 7.38 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. |
| 06/07/2023 | 10:09 | PIPER B | 7.13 | 34.71 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. Platform had been progressing a Demulsifier trial to move to a replacement chemical, during which time there were some OiW excursions >30mg/l, but <100mg/l. |
| 06/07/2023 | 10:51 | NORTHERN ALBA | 0.63 | 6.34 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. |
| 06/07/2023 | 10:37 | GLOBAL PRODUCER | 0.06 | 0.45 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. During this period, the PWRI pump tripped resulting in fluids being returned to the main separator. As a result of the influx of fluids, the contents of the separator tend to churn resulting in a higher than normal overboard OIW concentration, although still within legal limits. |
| 07/07/2023 | 10:53 | SHELL LEMAN A | 0.02 | 0.22 | UK Government Inspector assessment: Previous communication with inspector has confirmed that the surface oil observed is a result of the natural sea flattening as the tide passes through structures in the area, due to the direction of tidal flow. This causes the appearance of a “slick” from every structure, including the SBV. |

**THE UNITED KINGDOM:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Date (ddmmyy)** | **Time (UTC)** | **Platform** | **Reported quantity (m³)** | | **Government inspectors assessment** |
| **Min.** | **Max.** |
| 07/11/2023 | 14:20 | FORTIES A | 0.14 | 1.35 | UK Government Inspector assessment: Oil in produced water, within legal limits. |
| 07/11/2023 | 14:24 | FORTIES D | 0.02 | 0.20 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. Cyclical well brought online and offline in period but all produced water within limits. |
| 07/11/2023 | 14:28 | FORTIES C | 0.05 | 0.46 | UK Government Inspector assessment: Oil in produced water, normal conditions, within legal limits. NGL/DGL trip may have impacted produced water quality, but within limits. |
| 08/11/2023 | 09:15 | CLAYMORE | 0.02 | 0.17 | UK Government Inspector assessment: Minor slick identified, oil in produced water, normal conditions, within legal limits |
| 08/11/2023 | 09:16 | CLAYMORE | 0.00 | 0.03 | UK Government Inspector assessment: Same detection as above |
| 08/11/2023 | 09:28 | PIPER B | 0.58 | 5.63 | UK Government Inspector assessment: Oil in produced water, within legal limits. |
| 08/11/2023 | 09:31 | PIPER B | 0.00 | 0.01 | UK Government Inspector assessment: Same detection as above |

**TOUR D’HORIZON 2023 – FLIGHT MAPS**

**Germany: 03-05 April 2023.**

****

**Sweden: 06 June 2023.**

**A map of the north pole

Description automatically generated**

**Belgium: 03-07 July 2023.**

**A map of the north sea

Description automatically generated**

**The United Kingdom: 07-10 November 2023.**

A map of the sea

Description automatically generated

**Norway: 20-21 November 2023.**

**A map of the north sea

Description automatically generated**

1. Offshore Industry Committee [↑](#footnote-ref-1)
2. 2006 is the year Belgium started compiling annual TdH reports on behalf of OTSOPA. [↑](#footnote-ref-2)
3. Two weeks prior to the passage of the BE aircraft, there had been a 15 km² SAT detection (KSAT) confirmed as a quite consistent oil slick by the NO aircraft on the surface the day after. The platform had still been within legal limits, but stated they had some issues with visible oil at the surface during calm weather after removal of a spreader plate for produced water. Two days prior to the BE TDH passage, NO had a 6 km² SAT detection (KSAT) on the same location. However, on 4/07 the SAT image from EMSA did not show any detection. [↑](#footnote-ref-3)