FOR COLLATIMG CENTRE USE

| CRUISE SUMMARY REPORT  | Centre: DOD                 | Ref. No     | .: ∠UU516                                      | 4       |
|--|-----------------------------|-------------|--|---------|
|  | Is data exchange restricted | ☐<br>Yes    | ☐<br>In part                                   | □<br>No |
| <b>SHIP</b> enter the full name and international radio call sign of the ship from which the data were convex example, research ship; ship of opportunity, naval survey vessel; etc. | ollected, and indica        | e the typ   | e of ship, for                                 |         |
| Name: Gauss Ca   | all Sign: DBB               | X           |  |         |
| Type of ship: Research Vessel  |                             |             |  |         |
| CRUISE NO. / NAME 446a   | or acroi                    | nym assig   | number, nam<br>gned to the cr<br>appropriate). |         |
| CRUISE PERIOD start (set sail) 10/08/2005 to 29/08/2005 day/ month/ year to day/ month/ year entered   | d<br>rn to port)            |             |  |         |
| PORT OF DEPARTURE (enter name and country) Hamburg, Germany  |                             |             |  |         |
| PORT OF RETURN (enter name and country) Cuxhaven, Germany  |                             |             |  |         |
| RESPONSIBLE LABORATORY enter name and address of the laboratory responsible the cruise   | for coodinating the         | scientific  | c planning of                                  |         |
| Name: Federal Maritime and Hydrographic Agency (BSH)   |                             |             |  |         |
| Address: Bernhard-Nocht-Str. 78, 20359 Hamburg   |                             |             |  |         |
| Country: Germany   |                             |             |  |         |
| CHIEF SCIENTIST(S) enter name and laboratory of the person(s) in charge of the scientification   | fic work (chief of mi       | ssion) du   | ring the cruis                                 | e.      |
| Dr. G. Becker  |                             |             |  |         |
| OBJECTIVES AND BRIEF NARRATIVE OF CRUISE enter sufficient information as to provide the context in   |                             |             |  | e so    |
| Investigation of the summerly hydrographic situation of the North Sea, the with continuous "Delphin"-tracks (towed undulating CTD-system) and CT                                     |                             |             | the Chani                                      | nel     |
| chlorophyll-fluorescens, oxygen, nutrients, organic pollutants and radioa  | activity;                   |             |  |         |
|  |                             |             |  |         |
|  |                             |             |  |         |
|  |                             |             |  |         |
|  |                             |             |  |         |
|  |                             |             |  |         |
|  |                             |             |  |         |
| <b>PROJECT</b> (IF APPLICABLE) if the cruise is designated as part of a larger scale cooperate of the project, and of organisation responsible for co-ordinating the project.        | ive project (or expe        | dition), th | en enter the                                   | name    |
| Project name:  |                             |             |  |         |
| Coordinating body:   |                             |             |  |         |
|  |                             |             |  |         |

**PRINCIPAL INVESTIGATORS:** Enter the name and address of the Principal Investigators responsible for the data collected on the cruise and who may be contacted for further information about the data. (The letter assigned below against each Principal Investigator is used on pages 2 and 3, under the column heading 'PI', to identify the data sets for which he/she is responsible)

- A. Dr. G. Becker, BSH
- B. Dr. Weigelt-Krenz, BSH
- C. Dr. Nies, BSH
- D. Dr. Theobald, BSH
- E. Dr. Brockmann, Inst. f. Biogeochemie und Meereschemie, 20146 Hamburg

F.

## MOORINGS, BOTTOM MOUNTED GEAR AND DRIFTING SYSTEMS

This section should be used for reporting moorings, bottom mounted gear and drifting systems (both surface and deep) deployed and/or recovered during the cruise. Separate entries should be made for each location (only deployment positions need be given for drifting systems). This section may also be used to report data collected at fixed locations which are returned to routinely in order to construct 'long time series'.

| See<br>top of<br>page. | deg | AIIIODI | APPROXIMATE POSITION  LATITUDE LONGITUDE |     | TYPE | Identify, as appropriate, the nature of the instrumentation the parameters (to be |  |   |
|------------------------|-----|---------|--|-----|------|---|--|---|
|                        | J   | min     | N/S                                      | deg | min  | E/W   | enter<br>code(s)<br>from list on<br>cover<br>page. | Identify, as appropriate, the nature of the instrumentation the parameters (to be measured, the number of instruments and their depths, whether deployed and/or recovered, dates of deployments and/or recovery, and any identifiers given to the site. |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |
|                        |     |         |  |     |      |   |  |   |

## SUMMARY OF MEASUREMENTS AND SAMPLES TAKEN

Except for the data already described on page 2 under 'Moorings, Bottom Mounted Gear and Drifting Systems', this section should include a summary of all data collected on the cruise, whether they be measurements (e.g. temperature, salinity values) or samples (e.g. cores, net hauls).

Separate entries should be made for each distinct and coherent set of measurements or samples. Different modes of data collection (e.g. vertical profiles as opposed to underway measurements) should be clearly distinguished, as should measurements/sampling techniques that imply distinctly different accuracy's or spatial/temporal resolutions. Thus, for example, separate entries would be created for i) BT drops, ii) water bottle stations, iii) CTD casts, iv) towed CTD, v) towed undulating CTD profiler, vi) surface water intake measurements, etc.

Each data set entry should start on a new line - it's description may extend over several lines if necessary.

NO, UNITS: for each data set, enter the estimated amount of data collected expressed in terms of the number of 'stations'; miles' of track; 'days' of recording; 'cores' taken; net 'hauls'; balloon 'ascents'; or whatever unit is most appropriate to the data. The amount should be entered under 'NO' and the counting unit should be identified in plain text under 'UNITS'.

|   | u                  | inder 'NO' and        | the counting unit                                | should be identified in plain text under 'UNITS'.  |
|---|--------------------|-----------------------|--|--|
| PI<br>see<br>page<br>2                  | NO<br>see<br>above | UNITS<br>see<br>above | DATA TYPE  Enter code(s) from list on cover page | DESCRIPTION  Identify, as appropriate, the nature of the data and of the instrumentation/sampling gear and list the parameters measured. Include any supplementary information that may be appropriate, e. g. vertical or horizontal profiles, depth horizons, continuous recording or discrete samples, etc. For samples taken for later analysis on shore, an indication should be given of the type of analysis planned, i.e. the purpose for which the samples were taken. |
| Α                                       | 2050               | nm                    | H11  | towed CTD (undulating between 5m and 80m)  |
|   |                    |                       |  | with sensors for oxygen, chlorophyll and turbidity   |
| Α                                       | 62                 | station               | H10  | Seabird-CTD with GO-waterbottles (employed on upcasts at each station);  |
| Α                                       | 349                | samples               | H09  | calibration samples for salinity,  |
| Α                                       | 2900               | nm                    | H71  | Thermosalinograph and BackScat-2-Fluorometer (chlorophyll, turbdity and yellow substance)  |
| С                                       | 61                 | station               | H31  | Radioactivity  |
| D                                       | 12                 | station               | P01  | Centrifuge   |
| В                                       | 62                 | station               | P01  | Filtration   |
| В                                       | 62                 | station               | H21  | Oxygen   |
| E                                       | 62                 | station               | B02  | Chlorophyll  |
| E                                       | 62                 | station               | B06  | DOC, DON, DOP  |
| E                                       | 62                 | station               | H90  | Turbidity  |
| В                                       | 62                 | station               | H22  | Phosphates   |
| В                                       | 62                 | station               | H23  | Total P  |
| В                                       | 62                 | station               | H24  | Nitrates   |
| В                                       | 62                 | station               | H25  | Nitrites   |
| В                                       | 62                 | station               | H26  | Silicates  |
| Е                                       | 62                 | station               | H28  | рН   |
| E                                       | 60                 | station               | D90  | Secci depth  |
| D                                       | 2                  | station               | G04  | Gemini Corer   |
| С                                       | 61                 | station               | H32  | Isotopes   |
| С                                       | 84                 | station               | H32  | Jod 129  |
| D                                       | 23                 | station               | P90  | polar Pesticides   |
| D                                       | 31                 | station               | P13  | organic Pollutants   |
|   |                    |                       |  |  |
| *************************************** |                    |                       |  |  |
| *************************************** |                    |                       |  |  |
|   |                    |                       |  |  |
| *************************************** |                    |                       |  |  |
| *************************************** |                    |                       |  |  |
| *************************************** |                    |                       |  |  |
|   |                    |                       |  |  |
| *************************************** |                    |                       |  |  |
| *************************************** |                    |                       |  |  |
|   |                    |                       |  |  |
| *************************************** |                    |                       |  | Please continue on separate sheet if necessary   |
|   |                    |                       | -  |  |

TRACK CHART: You are strongly encouraged to submit, with the completed report, an annotated track chart illustrating the route followed and the points where measurements were taken.

Insert a tick(♥) in this box if a track chart is supplied



**GENERAL OCEAN AREA(S):** Enter the names of the oceans and/or seas in which data were collected during the cruise – please use commonly recognised names (see, for example, International Hydrographic Bureau Special Publication No. 23, 'Limits of Oceans and Seas').

North Sea, German Bight

**SPECIFIC AREAS:** If the cruise activities were concentrated in a specific area(s) of an ocean or sea, then enter a description of the area(s). Such descriptions may include references to local geographic areas, to sea floor features, or to geographic coordinates. **Please insert here the number of each square in which data were collected from the below given chart** 

181, 216

