

LOCATING NATURAL GAS RESERVOIRS IN THE NORTH SEA

Natural gas will only be found in areas where there is

1. a suitable source rock which has been buried deeply enough
2. a porous and permeable reservoir rock
3. a cap rock.

Drilling in Holland had shown that the source rock for the natural gas was coal, the reservoir rock was a red dune sandstone called the Rotliegendes Sandstone and the cap rock was the Zechstein salt bed.

You are provided with the following four maps which show:

- 1 The area underlain by the Coal Measures
- 2 The area underlain by the dune sandstones
- 3 The area underlain by the Zechstein salt
- 4 A blank map

Transfer the outcrops of the coal measures, dune sandstones and salt onto the blank map by tracing each map. The colour in the area where you think natural gas might be found.

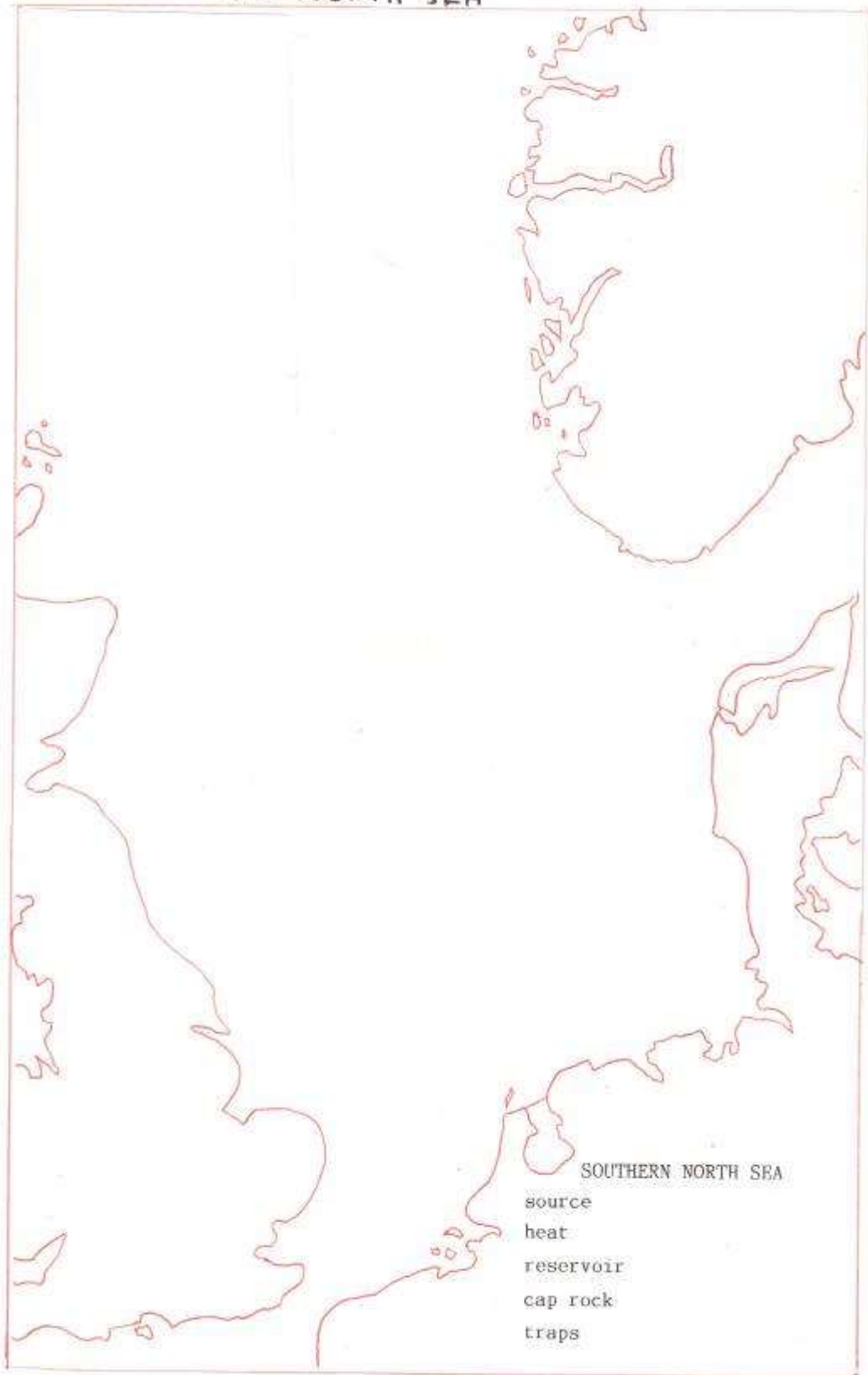
Do not mark the maps with the geology on. Return them when you have traced the information.

Once companies have outlined the areas where oil is likely to occur their next task is to locate the traps in which the oil is held using seismic exploration techniques.

Teacher's Section

Check that all the maps are the same size because sometimes this changes during electronic transfer.

THE NORTH SEA

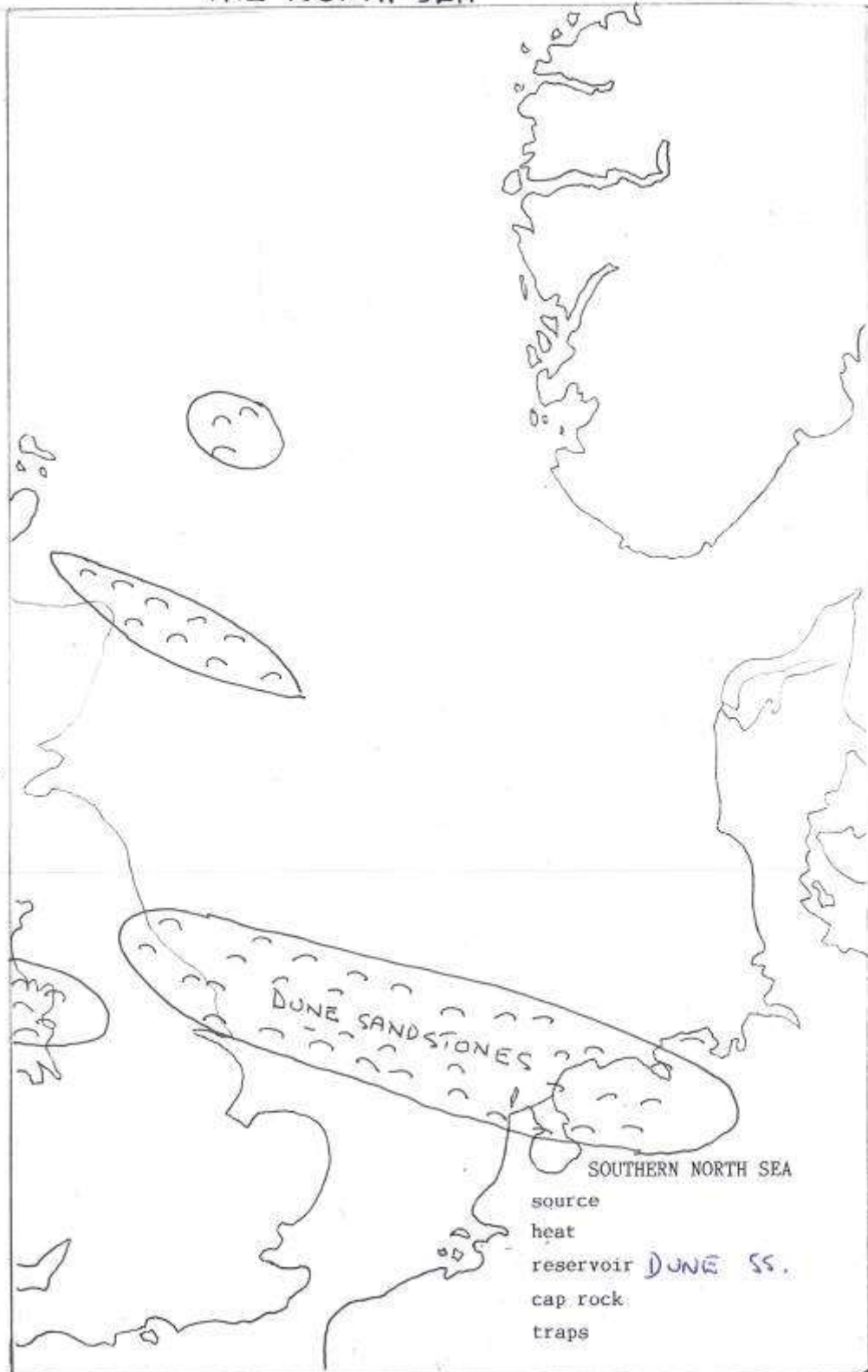


THE NORTH SEA



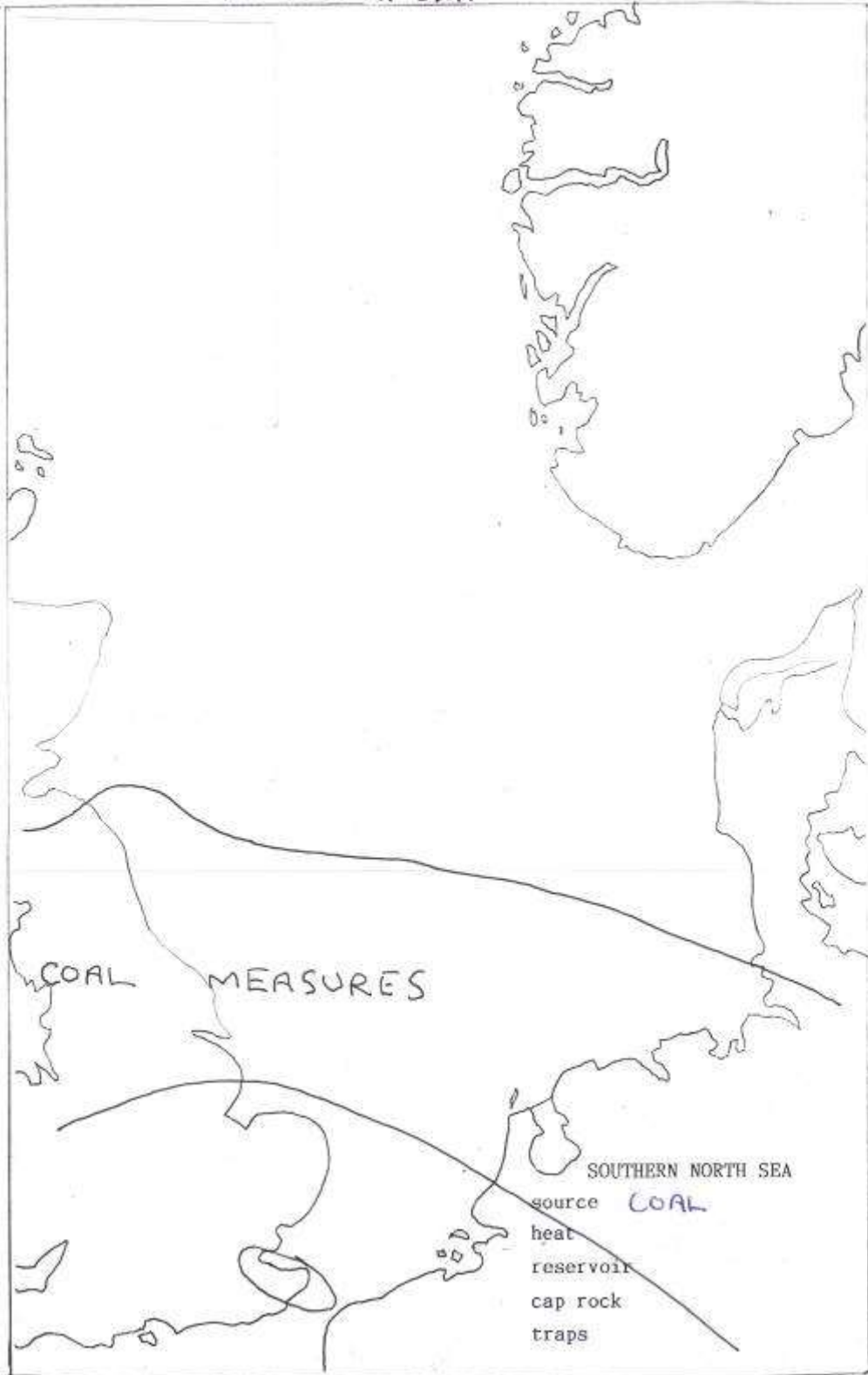
DO NOT MARK THIS MAP

THE NORTH SEA



DO NOT MARK THIS MAP

THE NORTH SEA



Do NOT MARK THIS MAP