



# BAROID DIVISION NATIONAL LEAD COMPANY DRILLING MUD REPORT

Date 16/10/1971

|   |   |                                    |   |  |                       |
|---|---|------------------------------------|---|--|-----------------------|
| Operator <u>Phillips Pet Co.</u>                  |   | Contractor <u>ODECO</u>            |   | Rig No. <u>O. Viking</u>                           |                       |
| Address <u>Stavanger</u>                          |   | Address <u>Stavanger</u>           |   | Spud Date <u>Completion</u>                        |                       |
| Report for Mr. <u>Holls</u>                       |   | Report for Mr. <u>Redford</u>      |   | Sec. <u>    </u> Twp. <u>    </u> Rng. <u>    </u> |                       |
| Well Name and No. <u>214-1AX</u>                  |   | Field or Block No. <u>Ekofisk</u>  |   | County, Parish or Offshore Area <u>North Sea</u>   |                       |
| Operation <u>    </u>                             |   | Casing <u>    </u>                 |   | State/Province <u>Norway</u>                       |                       |
| Depth <u>10,754</u>                               | Surface <u>9 7/8</u> in. @ <u>7762</u> Ft.    | Hole <u>7 7/8</u> Pits <u>450</u>  | Circulation Data                        |  | Annular Vel. Ft./Min. |
| Bit Size in. <u>    </u> No. <u>    </u>          | Intermediate <u>7</u> in. @ <u>10,364</u> Ft. | Total Circulating Vol. <u>1190</u> | Pump Size <u>    </u> X <u>    </u> in. | Opp DP <u>    </u>                                 | Opp Col. <u>    </u>  |
| Drill Pipe Size <u>    </u>                       | Production in. @ <u>10,805</u> Ft.            | In Storage <u>    </u>             | Bbl./Cyc. <u>    </u>                   | Stand Pipe Press, psi <u>    </u>                  |                       |
| Drill Collar: Size <u>    </u> Length <u>    </u> |   | Wt. of Stored Mud <u>    </u>      | Cyc./Min. <u>    </u>                   | Circulating Bottom Up, Min. <u>    </u>            |                       |
|   |   |                                    | Bbl./Min. <u>    </u>                   | Circulating Total, Min. <u>    </u>                |                       |

### DRILLING FLUID SPECIFICATIONS

|  |                    |                   |                         |  |  |                            |
|--|--------------------|-------------------|-------------------------|--|--|----------------------------|
| Packer fluid<br>Type <u>Sea H<sub>2</sub>O - Desco</u> | Weight <u>14.3</u> | Vis. <u>30-55</u> | Filtration <u>10-15</u> | Operator's Written Operator's Rep. <input checked="" type="checkbox"/> | Authority:<br><input checked="" type="checkbox"/> Drilling Contractor <input type="checkbox"/><br><input type="checkbox"/> Other | Mud Cost Daily <u>    </u> |
| Mud Cost Cumulative <u>    </u>                        |                    |                   |                         |  |  |                            |

### EQUIPMENT

Shale Shaker  DD Shaker  Desander  Degasser  Centrifuge  Other

### MUD PROPERTIES

|   |                          |  |   |
|---|--------------------------|--|---|
| Time <u>    </u> a.m. <input type="checkbox"/> p.m. <input type="checkbox"/>                            | Temp. Mud °F <u>    </u> | Mud Sample Taken <u>    </u>   | Flowline <input type="checkbox"/> Pit <input checked="" type="checkbox"/> |
| Weight of Mud lb/gal <input checked="" type="checkbox"/> lb/cu ft <input type="checkbox"/>              | Present <u>14.31</u>     | Plastic Viscosity, cp @ <u>    </u> °F   | <u>29</u>   |
| Viscosity, Funnel, Sec./qt API @ <u>    </u> °F   | <u>49</u>                | Yield Point, lb/100 sq ft  | <u>12</u>   |
| Filtrate, ml, API   | <u>10.3</u>              | Gels, lb/100 sq ft, 10 sec./10 min.  | <u>2/8</u>  |
| Filtrate, API HT-HP @ <u>    </u> °F  | <u>    </u>              | Calcium Ion; ppm <input checked="" type="checkbox"/> epm <input type="checkbox"/>                            | <u>240</u>  |
| Cake, 32nd In. API <input checked="" type="checkbox"/> HT-HP <input type="checkbox"/>                   | <u>1/32</u>              | Alkalinity, API { Pf, cc N/50 H <sub>2</sub> SO <sub>4</sub>   | <u>.5</u>   |
| Sand Content <input checked="" type="checkbox"/> Sand only <input type="checkbox"/> all solids % by Vol | <u>42.41</u>             | { Pm, cc N/50 H <sub>2</sub> SO <sub>4</sub>   | <u>    </u>   |
| Salt ppm <input type="checkbox"/> Chloride ppm <input checked="" type="checkbox"/>                      | <u>25,500</u>            | lb/bbl lime <input type="checkbox"/> gyp <input type="checkbox"/> CaCl <sub>2</sub> <input type="checkbox"/> | <u>    </u>   |
| ppm <input type="checkbox"/> Chloride ppm <input type="checkbox"/>                                      | <u>    </u>              | Oil.....% by Vol   | <u>TR</u>   |
| electrode <input checked="" type="checkbox"/> filtrate <input type="checkbox"/>                         | <u>11.4</u>              | Water.....% by Vol   | <u>77</u>   |
| pH indicator <input type="checkbox"/> mud <input type="checkbox"/>                                      | <u>23</u>                | Liquid phase, Vol% oil/water   | <u>+</u>  |
| Solids.....% by Vol   | <u>    </u>              | Electrical Stability, volts  | <u>    </u>   |
| Solids, av. sp. gr. <input type="checkbox"/> ppb low gr. <input type="checkbox"/>                       | <u>    </u>              |  |   |
| <u>Reagents PPB (M.B. Test)</u>   | <u>17</u>                |  |   |

### ADDITIVES IN MUD

### MATERIALS RECOMMENDED

|  |                               |           |
|--|-------------------------------|-----------|
| COMMENTS<br><u>Tested sliding sleeve, set Otis separation sleeve. Flawed well for 10 1/2 hours to clean up &amp; then through separator. Tested valves on tree, rigged up B.S. lines to acid tanks. Started acidizing well. Checked mud in pits after displacing tubing with water. Wt of returns - 14.1</u> | BAROID SALES ENGINEER         | TELEPHONE |
|  | NAME <u>Thanks N. Ruffing</u> | MOBILE    |
|  | HOME ADDRESS                  | HOME      |
|  | STORE ADDRESS                 | STORE     |

THIS COPY TO AREA MGR.

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