

## B<sub>29</sub>, Beaully and Balmoral Header Detailed Design

OIL

### Oilexco North Sea Limited

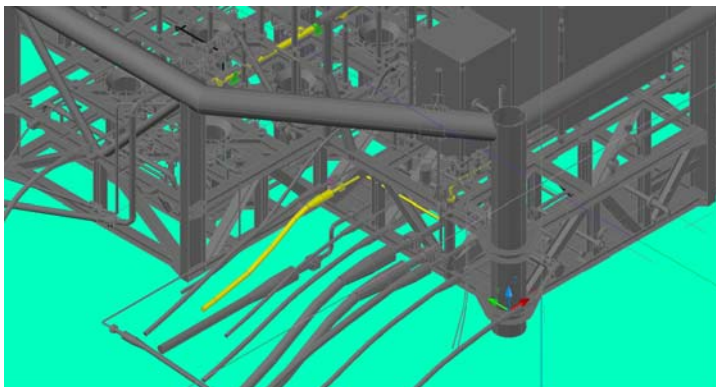
For the tie-in of well B29 to the Balmoral Template, Well A27 and Beaully Risers had to be removed to facilitate the replacement of the production header. To avoid a lengthy shut-down of A27 and Beaully, Andrew Palmer & Associates devised temporary re-routings of A27 and Beaully production via alternative risers. Drawings of available options were prepared and the results of a study led to selection of the best method. Replacement spools for two headers (PAL-1 and PAL-2) on the Balmoral template were also designed.

Use was made of the 3D CAD model owned, developed and updated by Andrew Palmer & Associates over a period of several years.

Andrew Palmer & Associates then provided project management, procurement and fabrication supervision for the production of the above spools and associated valves.

#### Andrew Palmer & Associates scope of work:

- Study of Options available
- Choice of temporary re-routing of production from Beaully and Well A27
- Design of PAL-1 and PAL-2 replacement headers
- Stress analysis of retro-fit pipework
- Drawings for new tie-in pipework
- Design of supports for tie-in headers



- Specifications for Structural Steel, Pipes, Flanges & Fittings, Small-bore Valves and Spoolpiece Coating and Insulation
- Preparation of Invitations to Tender
- Review of Suppliers' Responses and Procedures
- Supervision of Fabrication

<b>Location:</b>	Central North Sea, UK	<b>Contract:</b>	Lump Sum			
<b>Block:</b>	16/21b	<b>Manhours:</b>	<500 <input type="checkbox"/>	500-5000 <input checked="" type="checkbox"/>	5000-10,000 <input type="checkbox"/>	>10,000 <input type="checkbox"/>
<b>Water depth:</b>	145m	<b>Penspen Value:</b>	<\$100k <input type="checkbox"/>	\$100k-500k <input type="checkbox"/>	\$500k-1,000k <input checked="" type="checkbox"/>	>\$1,000k <input type="checkbox"/>
<b>Duration:</b>	23 weeks					

80096AW/ 80125AW/ 80131AW

