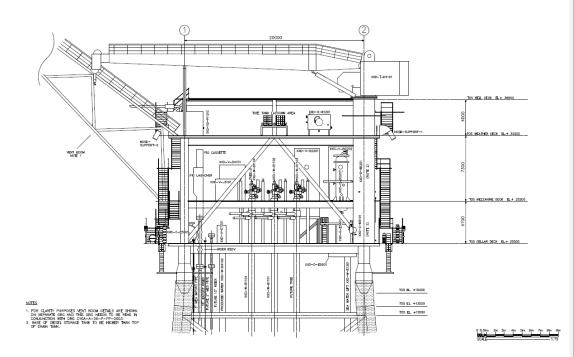
# North Sea FEED



#### Deliverables:

Front end engineering design process:

- Facilities
- Structural
- E&I
- Safety
- Piping
- Mechanical
- Specification for procurement of LLI
- Specifications for procurement of jacket & topsides
- Contracting strategy
- Project execution plan
- Bid evaluation of all key equipment packages

### Background:

The client's reservoir lies in blocks in the UK's SNS gas basin, approx 150km north east of Easington. Optimus were awarded the FEED contract for a 6 well NUI platform to be sited in 21m of water.

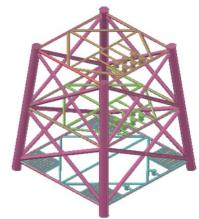
The FEED was successfully completed by Optimus to schedule for a 4-legged jacket design, main deck and topsides facilities. The jacket, piles and main deck were designed and fully specified to allow issue of the fabrication ITT. The fabrication tenders were evaluated and recommendation for award made. Similarly the main topsides equipments were specified, tender packages issued and technical bid evaluations completed to allow award to the successful vendor.



## Key Equipment:

The key equipments and LLI's for the project were specified and recommendations for award made. These included platform crane, separator, generators, produced water handling, integrated controls and safety system, telecoms, subsea valves, topside actuated valves, wellhead control panel and proppant package.

The equipment was specified to a design pressure of 358 barg. The Optimus facilities engineering team developed layouts for each level and incorporated these in 3D drawings of the proposed NUI platform.



## Jacket & Topsides:

Structural design and specification was carried out for the jacket & topsides including lift plans. All structural assessments and verifications were carried out by Optimus to provide a quality design.

#### **Project Successes:**

The FEED report was completed in 4 months, on schedule and on budget for the project, ahead of the industry standard 6 months.

Multi-Discipline Engineering and Project Support	
Process	Concept and Front End study, through detail engineering to project and ops support
Safety and loss prevention	Industry experts each with more than 20 years experience
Structural	Conceptual, detailed and advanced analysis solutions for all structures, caissons and fabrications
Facilities	All disciplines including stress analysis, drafting, electrical, instrumentation and control, mechanical, piping
Business improvement	Facilitated decision-making, availability modelling, probabilistic cost and schedule risk and opportunity analysis for business and projects
Maintenance and operations support	Availability analysis and modelling
Commissioning	Engineers experienced in the commissioning of projects both on and offshore
Decommissioning	Preparation of decommissioning liability estimating, planning and management of decommissioning
Projects execution	Planning, scoping and management of brownfield and greenfield oil and gas projects
Manpower resourcing	Provision of personnel for short and long term assignments

