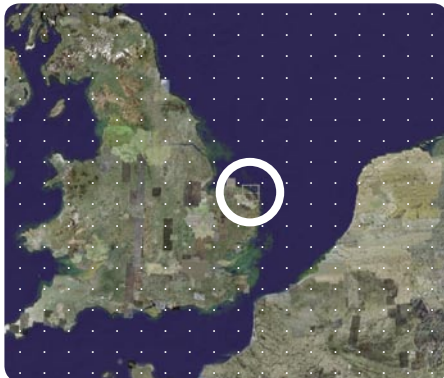


Shell Expro

North Walsham Gas Condensate Rail Loading Conversion to Bottom Loading and Vapour Recovery Design & Project Management

Project no: AA011525
 Project: Bottom Loading and VRU
 Service: Technical Consulting
 Project stage: Design/ Management
 Product: Gas Condensate
 Region: UK / Europe
 Value: £1 Million



A detailed Front End Engineering Design study was complete to provide detail costing and programme for the conversion of an existing fully operational open top loading system of North Sea Gas Condensate into rail cars into a bottom loading system.

The revised facilities were designed to capture all vapours that would have previously escaped to atmosphere and recover these vapours via a new Vapour Recovery Unit back to the initial feed stock.

BPA were commissioned by Shell Expro to Project Manage (and act as Planning Supervisor under the CDM Regulations), the design and modification of the existing two loading gantry's and installation of the new VRU.

The requirement was for two off loading gantries, each with two off loading bays loading at a maximum rate of 480 m³/hr. The system was designed to cater for 24 hr, 7 day week operation.

The works were scheduled around a fully operational site, maintaining at least one fully operational gantry at all times. Site throughputs were not affected at any time thus not affecting the main gas producers.

Reason for implementation: Condensate smells developing complaints from locals. Benzene levels for staff approaching OEL limits. Impending legislation, wishing to be pro active - Client reputation

Scope: Remove existing rail top loading facilities and replace with bottom loading gantries which provide a totally closed system. Install Vapour Recovery Unit to capture vapours and return to main storage by reabsorption.

Result: Clean site, no complaints, smell eliminated/greatly reduced. Worker OEL's significantly reduced.

