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## Heavy Oil

### Controlled Document

Quest CCS Project

# Quest Heat Integration Report 2015

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## Signatures for this revision

Date	Role	Name	Signature or electronic reference (email)

## Summary

This document summarizes heat recovery between the Quest CCS project and the Scotford Upgrader, and documents any updates to heat integration schemes associated with the Quest facility.

## Keywords

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Heat Integration Report

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None

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None

## 1. QUEST HEAT INTEGRATION SUMMARY

Installed heat integration within the Quest CCS capture unit is as per the BDEP. As-built process engineering flow schemes and utilities engineering flow schemes (P&IDs) have been included in the detailed report submission for reference.

Heat integration with the base Scotford Upgrader comprises of demin water heaters, pre-heating demin water from tankage, upstream of the de-aerator. This is accomplished via cross exchange with the CO<sub>2</sub> stripper reboiler LP steam condensate stream. The installed process line-up reduces the stripping steam requirement in the de-aerator.

Heat recovered in 2015 amounted to 33,617 MWh, equivalent to ~54,000 tonnes of LP steam savings over the reporting period (~17 t/h). This was 13% of the total LP steam utilized in the Quest capture unit to drive amine regeneration and local heating.

## 2. HEAT INTEGRATION CHANGES FROM DESIGN IN 2015

No changes were made to the original heat integration design as specified in the BDEP.

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