

INCREASING FCC EFFICIENCY WITH INFORMATION
GATHERED BY RADIOISOTOPE TECHNOLOGY

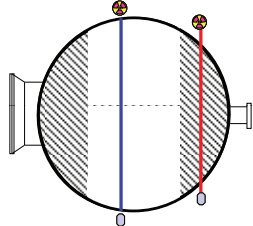
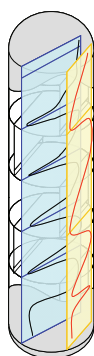
Dave Ferguson
Dave.Ferguson@tracerco.com

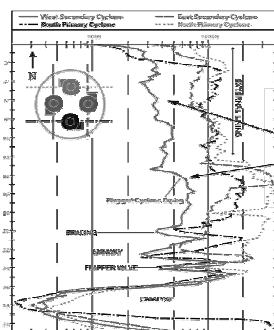
CatCracking.com
MORE PRODUCTION • LESS RISK
Galveston, TX 3 - 6 May 2011



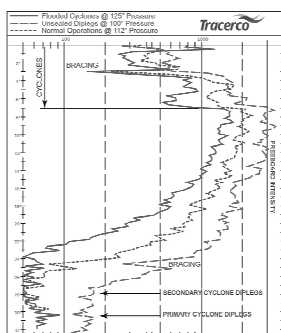
TRACERCO Diagnostics™
Scan Procedure

$$I = I_0 e^{-\rho\mu x}$$



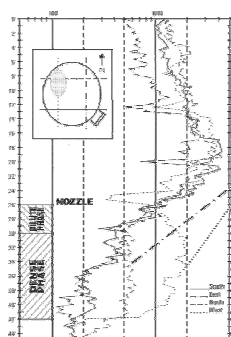


Catalyst Bed Level Measurement



Tracerco 4

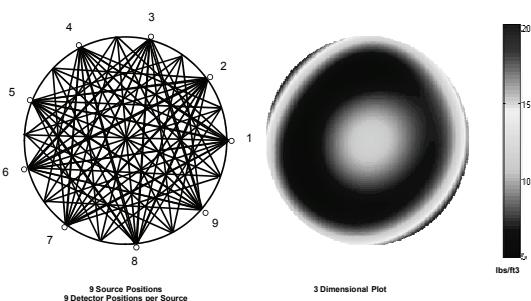
Regenerator Air Grid Failure



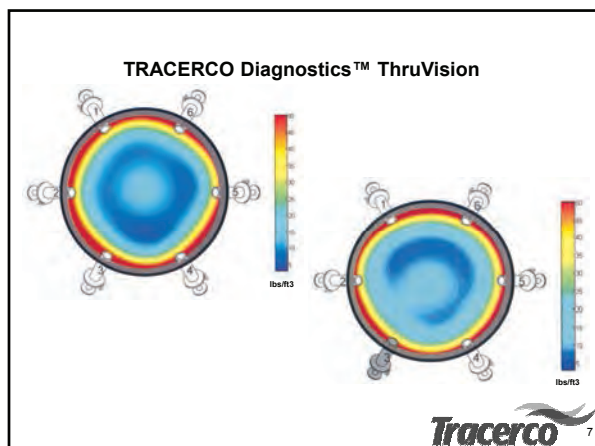
A significant stream of air was channeling in the Northwest quadrant, reducing the aerated catalyst density.

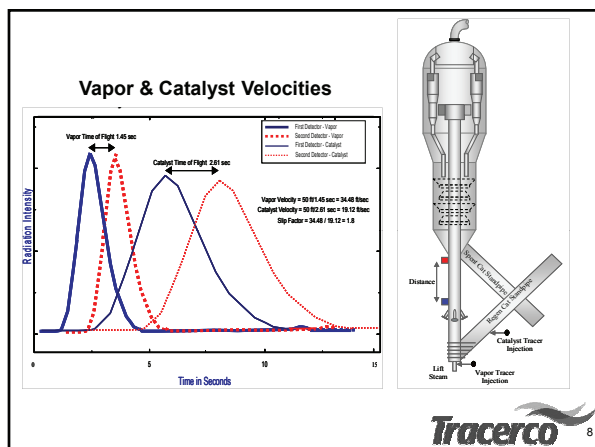
Tracerco 5

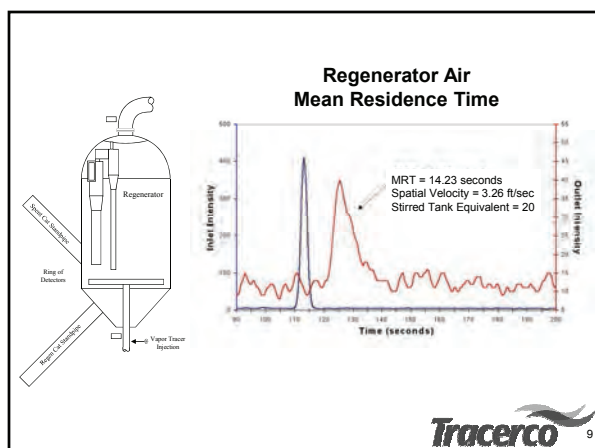
TRACERCO Diagnostics™ ThruVision

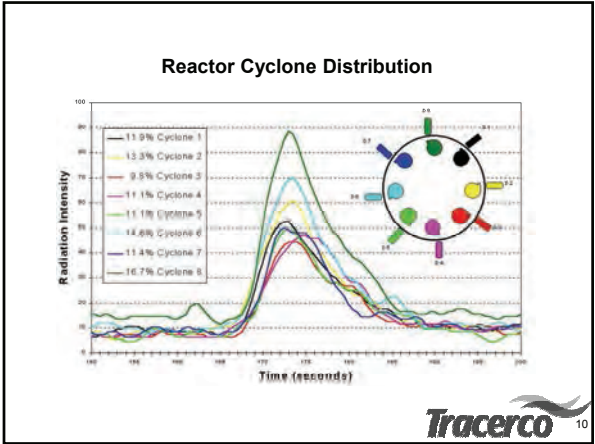


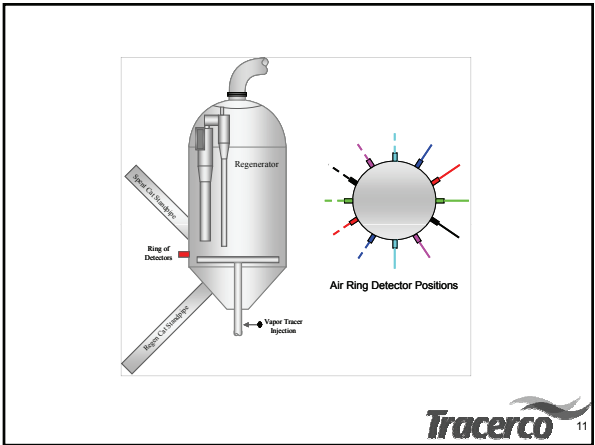
Tracerco 6

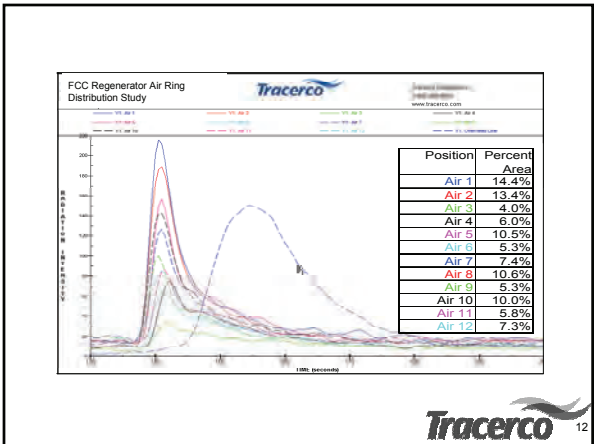


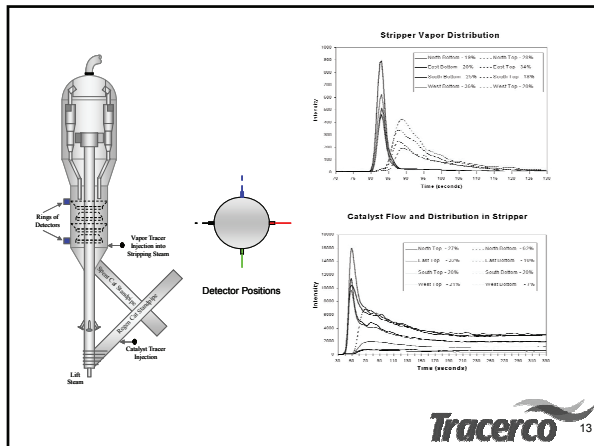


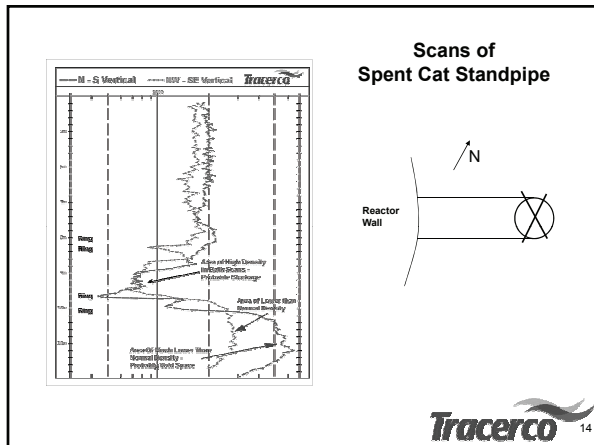


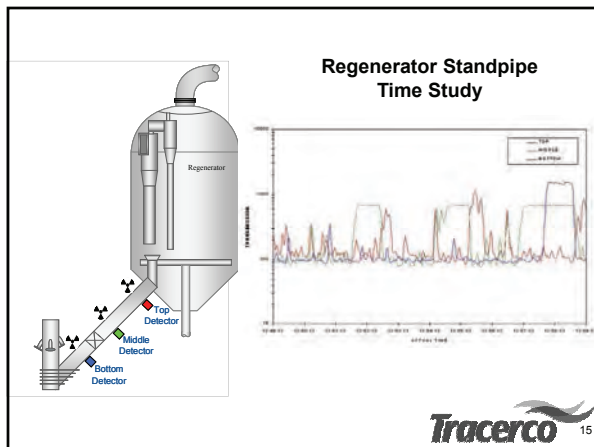












TRACERCO Diagnostics™ FCCU Study

Providing Insight Onsite

Any Questions?