

FORM: IMS001 – Devon Standard Inspection Form

Equipment:			
District:	Fairview	Equipment Name:	Glycol Reboiler
Plant / Area:	Puskwaskau	Equipment Number:	95261-AI-1
LSD:	3-26-74-1W6	Manufacturer:	Propak
Functional Block (Process Unit):	DPCU	Manufacture Serial Number:	95261-AI-1
Equipment Type:	Indirect fired Heater (Noncode-Vessel)	Provincial Registration Number:	NA
CRN:	N1350.2		
Inspection Personnel:			
Inspection Company:	Devon	Extent of Inspection:	Full Internal
Name of Inspector:	Jason McGovern	Date of Inspection:	June 17, 2009
Inspection Summary:			
<ul style="list-style-type: none"> - Short term corrosion rate = 0.100"/y on nozzle neck of tube bundle. Weld Build up completed. - Flange face between still column and reboiler is thinning - UT Inspection is required on Still Column shell on end connecting to reboiler. - Recommendation to tie vent line into underground sump system to eliminate oxygen from the system. 			
Inspection Details:			
<p>Shell:</p> <ul style="list-style-type: none"> - Corrosion is localize to the 12" nozzle neck to which the tube bundle is attached. Pitting is 0.090"-0.100" deep. Nozzle neck was replaced in Jan 2008. Corrosion was from 10 o'clock to 6 o'clock moving clockwise. All pits were filled in. - No other area of concern were noted on shell. <p>Tube Bundle:</p> <ul style="list-style-type: none"> - No indications of concern were noted on the bundle. 4 tubes were plugged in 2008 to attempt to reduce corrosion on shell. <p>Channel Head:</p> <ul style="list-style-type: none"> - No indications were noted on the channel head. <p>Still Column:</p> <ul style="list-style-type: none"> - Flange face that connects to reboiler shell is thinning. See attached photos - Internal corrosion was noted on lower shell. Scale was too tough to scrape away, External UT is required to determine extent of corrosion. - Coil has been upgraded to Stainless steel. 			
Repairs:			
<ul style="list-style-type: none"> - Weld build up was completed on all areas of corrosion. Build up was not ground flush, in order to provide additional corrosion allowance in effected areas. 			

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NDE Reports:

MPI on Weld Build up – Acuren report# M-086670

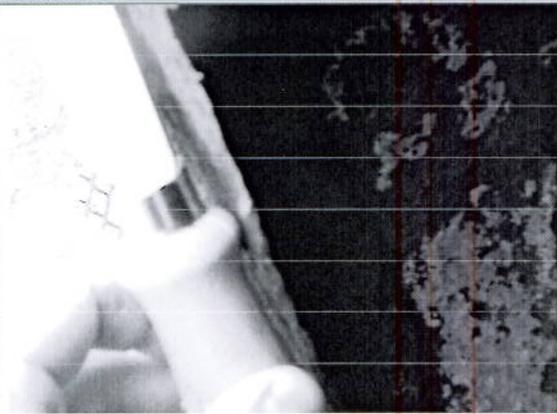
Recommendations:

- It is recommended that the line that vents to atmosphere is tied into the underground - sump system to eliminate oxygen from the system.
- Inspect in one year to determine if repairs are required on Nozzle neck at areas of corrosion.

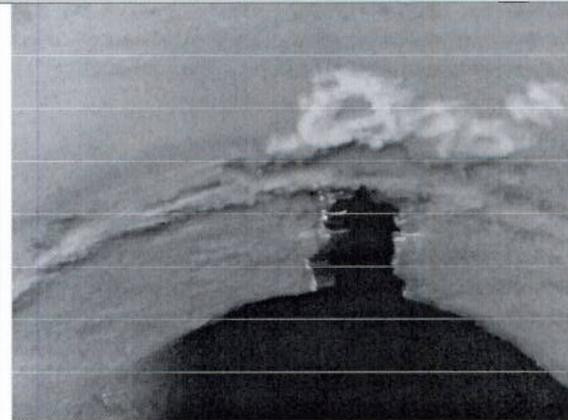
Certification:

Inspector Signature:		Provincial Certification Number:	
Date:	June 18, 2009		

Pictures:



Picture 1 (Desc.): Thinning Flange



Picture 2 (Desc.) Nozzle neck corrosion



Picture 3 (Desc.): from Still Column Nozzle



Picture 4 (Desc.)

Picture 5 (Desc.):	Picture 6 (Desc.)

Note:

1. Contractor inspector to submit complete inspection form in PDF or word with pictures attached as JPG.
2. Individual pictures must be in a format that is less than 2 MB.