

HEATER EXCHANGER INSPECTION REPORT

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FACILITY Jackfish Creek CS	DATE August 22, 2002	REPORT # IR_020822_MKY- 14
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EXCHANGER STATIC DATA

Prov. Insp. #	N/A	CRN	N/A	Equip Tag #	
Equipment Location (LSD)	15-15-65-02 W4M "Marie Lake South" Booster			Serial #	991703.3
Equipment Description	Compressor Lube Oil Cooler			Exchanger Class	A.C.H.E.
Manufacturer	Air-X-Changer (model 93 VI)			Year Built	1999
Shell MAWP	psig	@	°F	MDMT	°F
Tube MAWP	14	psig	@ 300	MDMT	-10F @ 50psi
CODE : UM <input type="checkbox"/> U <input type="checkbox"/> U2 <input type="checkbox"/>	ASME Sect VIII, Div 1			RT : 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>	PWHT : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
Tube Diameter	Mm/in	Tube Length	Mm/in	OAL	Mm/in
Tube Sheet Mat'l	SA-516-70	Thickness	unknown	Corr Allowance	unknown
Head Mat'l	SA-516-70	Thickness	unknown	Corr Allowance	unknown
Channel Mat'l		Thickness		Corr Allowance	
Nozzle Mat'l		Thickness		Corr Allowance	
Tube Mat'l	unknown	Thickness	unknown	Corr Allowance	unknown
Internal Coating : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Internal Clad : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			Capacity	m ³ /ft ³
Nozzle Rating	150 lb ANSI	Manway :	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Inspection Port : YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
Painted :	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Insulated :	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Skirt <input type="checkbox"/> Legs <input type="checkbox"/> Saddle <input type="checkbox"/>	

PROCESS DATA

Shell Product Description		Sweet <input type="checkbox"/> Sour <input type="checkbox"/> PPM
Tube Product Description	glycol	Sweet <input checked="" type="checkbox"/> Sour <input type="checkbox"/> PPM
Shell Operating Pressure	psig	Operating Temperature °F
Tube Operating Pressure	Atmospheric	Operating Temperature °F

PSV STATIC DATA

Tag / Serial No	Location	Size Inlet	Size Outlet	Set Pressure	Capacity SCFM / Lbs/Hr / GPM	Manufacturer	Model / Type	Service Date
N/A								

INSPECTION HISTORY

RBI Category A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/>	Last Inspection Date	W.O. # 6019115
Inspection Task List #	Inspection Type	Inspection Reason No inspection history
Inspection Techniques Required	Next Inspection Type	Due Date
VE <input checked="" type="checkbox"/> VI <input type="checkbox"/> RT <input type="checkbox"/> UT <input type="checkbox"/> MT <input type="checkbox"/> PT <input type="checkbox"/> PT <input type="checkbox"/> TT <input type="checkbox"/>	Outstanding Repairs	

INSPECTION SUMMARY

Vessel is in very good condition and is suitable for continued service.

RECOMMENDATIONS

Clean out debris from between cooling fins.

REPAIRS COMPLETED

Object Name	Cause	Damage	Repair Activity
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EXCHANGER STATUS

Integrity Status <input checked="" type="checkbox"/> Suitable for Continued Service	<input type="checkbox"/> Immediate Repairs Required	<input type="checkbox"/> Replace
	<input type="checkbox"/> Future Repairs Required	
Inventory Status <input checked="" type="checkbox"/> Inservice Fully Utilized	<input type="checkbox"/> Idle	<input type="checkbox"/> Surplus
		<input type="checkbox"/> Scrap
This IR completes a thorough inspection. Reschedule as indicated		<input checked="" type="checkbox"/> Partial IR only. Do not reschedule <input type="checkbox"/>

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INSPECTION OBSERVATIONS**NONCOMPLIANCES OR INSPECTION DEFICIENCIES ISSUED****EXTERNAL VISUAL INSPECTION**

The vessel has very good external appearance. The paint is intact and is in good condition. No visible corrosion. Cooling fins have no mechanical damage. Some build up of debris between cooling fins. No signs of leakage.

Piping is in good condition.

EXTERNAL NDE EXAMINATION**INTERNAL VISUAL INSPECTION****INTERNAL NDE EXAMINATION****PRESSURE TEST**

Test Completed <input type="checkbox"/> Yes <input type="checkbox"/> No	Test Acceptable <input type="checkbox"/> Yes <input type="checkbox"/> No	Test Report #
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INSPECTOR CERTIFICATION

I, the undersigned certify that the above equipment has been inspected in accordance with the assigned task list and that statements within this report are correct and represent inspection findings

Inspectors Name Manley Yuen	Inspector's Signature <i>Manley Yuen</i>
Inspection Company Ramtech Consulting Inc.	Date August 22, 2002

LEAD INSPECTOR'S ACCEPTANCE & SCHEDULE CONFIRMATION

Lead Inspector	Signature <i>(Signature)</i>	Date <i>08/22/02</i>
Vessel Inspection Interval 5 years	Leave "as-is" <input type="checkbox"/>	Change to
PSV Inspection Interval 5 years	Leave "as-is" <input type="checkbox"/>	Change to

Office Use Only Report Entered to SEQA Database by
Static Data Verified by

Date
Date



AERIAL COOLER INSPECTION REPORT

(Metric)

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Rev. 8-06-08

Facility: **MARIE LAKE BOOSTER** Date: **September 3, 2008** Report #: **IR080903GENf**

Area Supervisor: **ROGER BUREAU** W.O. / C.C.#: **70975**

STATIC DATA			
Alberta Reg. #:	66036781	CRN:	NON-CODE
Equipment Number:	66036781	Notification #:	-
Manufacturer:	AIR-X-CHANGERS	Serial Number:	991703.3
Equip. Description:	LUBE OIL / AUX. COOLER	Location (LSD):	15-15-065-02W4
Equipment Tag #:	-	Year Built:	1999
Province Installed:	ALBERTA	Company I.D.#:	BC-034751
Nameplate Attached:	YES	Registration #:	-
		Skid / Building #:	-
		Legible:	YES
		U1A Available:	NO

MAWP:	97	Kpa	Capacity:	-	m ³	Radiography:	NONE	Insulated:	NO
MAWT:	149	°C	Efficiency:	-		Stress Relief:	NO	Position:	VERTICAL
MDMT:	-23	°C	Code Stamp:	-		Ext. Coating:	YES	Support:	STRUCTURAL

Header Box Size:	Depth:	127	mm	Width:	178	mm	Height:	1226	mm	Overall Length:	3937	mm
Tube Size:	O.D.	-	mm	I.D.	-	mm	No. of Tubes	-		Test Pressure:	-	kpa

	Material	Thickness	Corrosion Allowance
Tube sheet	N/A	- mm	- mm
Plug sheet	N/A	- mm	- mm
Wrapper plates	N/A	- mm	- mm
End plates	N/A	- mm	- mm

Nozzle Description	I.D. #	NPS	Flange Rating	Type	Material	Thickness	Length
Inlet	-	51 mm	- #	NPT	N/A	- mm	- mm
Outlet	-	51 mm	- #	NPT	N/A	- mm	- mm

PROCESS DATA	
Product Description:	LUBE OIL
Operating Pressure:	- Kpa
Operating Temperature:	- °C
Service:	SWEET

PSV STATIC DATA	
Tag Number:	-
Manufacturer:	-
Company I.D. #:	NON-CODE
Model # / Type:	-
Serial Number:	-
CRN:	-
Equipment #:	-
Code Stamp:	-
Inlet Size:	- mm
Rating:	- #
Set Pressure:	- Kpa
Back Pressure:	- Kpa
Outlet Size:	- mm
Rating:	- #
Capacity:	-
Service Date:	-
Location of PSV:	-

INSPECTION DETAILS	
Inspection Reason:	CODE INSPECTION
Inspections Required:	VE
Inspection Test Plan:	-
Inspection Type Used:	VE
Last Inspection Date:	-
Next Inspection Type:	VE
Next Inspection Due:	2013
Outstanding Repairs:	NO
RBI Category:	A
	B
	C
	D

VESSEL STATUS	
Integrity Status:	SUITABLE FOR CONTINUED SERVICE
Inventory Status:	ISF
This IR completes a thorough inspection; reschedule as indicated.	YES
Partial inspection; do not reschedule.	-

INSPECTION SUMMARY

An inspection to verify the equipments integrity was done by VE.
There were no rejectable defects observed at this time; the vessel can be recommended fit for service.
There are no recommendations to be made at this time.
There were no repairs performed that were related to this inspection.
No NCR's were issued at this time.
No IDR's were issued at this time.
There was no external NDE performed during this inspection.
There was no internal inspection performed at this time.
There was no internal NDE performed during this inspection.

EQ # 66036781	NO # 6078716
Copied <input checked="" type="checkbox"/>	Scanned <input checked="" type="checkbox"/>
Entered SB	HDMS Linked <input type="checkbox"/>

RECOMMENDATIONS

REPAIRS COMPLETED

Facility: **MARIE LAKE BOOSTER** Date: **September 3, 2008** Report #: **IR080903GENf**

INSPECTION OBSERVATIONS

NON COMPLIANCES ISSUED

INSPECTION DEFICIENCIES ISSUED

EXTERNAL VISUAL INSPECTION

The nameplate is hard to read.
The cooler support is in good condition with no evidence of mechanical deterioration.
The cooler's ground connection is through the skid's ground rod.
The cooler fins are reasonably clean and in fair condition.
The fan was in operation at time of inspection; no visible defects were noted.
The plugs are tight and free of leaks.
The cooler is painted with no notable coating defects.
The piping and piping attachments are in fair condition with no detectable leaks.
The attached piping is painted with no notable defects.

EXTERNAL NDE

INTERNAL VISUAL INSPECTION


INTERNAL NDE

PRESSURE TESTS

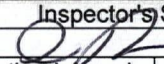
Test Completed: - Test Pressure: - Kpa Test Acceptable: - Test Report #: -

INSPECTOR CERTIFICATION AND ACCEPTANCE

I, the undersigned, certify that the equipment stated above has been inspected in accordance with the assigned task list and that the statements within this report are correct and represent my inspection findings.

External Inspector's Name:	Inspector's Certification:	Inspector's Signature:	Date:
GUY NORMAND C.E.T.	API 510, 653, ABSA PESL, NACE		SEPTEMBER 3, 2008
Internal Inspector's Name:	Inspector's Certification:	Inspector's Signature:	Date:
-	-	-	-

CHIEF OR LEAD INSPECTOR'S ACCEPTANCE AND SCHEDULE CONFIRMATION

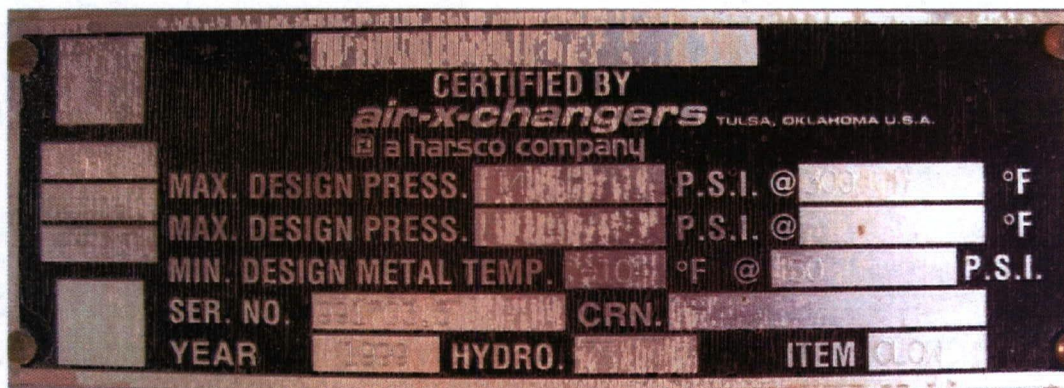
Inspector's Name:		Inspector's Certification:		Inspector's Signature:		Date:	
JIM RICE						sept 29, 08	
Vessel Inspection Interval:	Leave "As Is":	Change to:	PSV Inspection Interval:	Leave "As Is":	Change to:		
Years		Years	Years		Years	Years	

Office Use Only: Report Entered to SEQA Database by: _____
Static Data Verified by: _____

Date: _____
Date: _____

Do not Re-schedule 

Facility:	MARIE LAKE BOOSTER	Date:	September 3, 2008	Report #:	IR080903GENf
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NAMEPLATE



OVERALL VIEW