

FUEL GAS SCRUBBERS INSPECTION REPORT

Facility: **MARIE LAKE BOOSTER** Date: **September 3, 2008** Report #: **IR080903GENg**

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

STATIC DATA

Alberta Reg. #:		CRN:	M-8173.21	National Board #:	35902
Equipment Number:	66046261	Notification #:	6068872	Classification:	-
Manufacturer:	PERRY EQUIPMENT CORPORATION			Serial Number:	115343-19
Equip. Description:	FUEL GAS SCRUBBER			Location (LSD):	15-15-065-02W4
Equipment Tag #:	-	Year Built:	1999	Company I.D.#:	BC-034756
Province Installed:	ALBERTA	Registration #:	-	Skid / Building #:	BC-034765
Nameplate Attached:	YES	Legible:	YES	U1A Available:	NO

MAWP:	1896	Kpa	Diameter: O.D.	168	mm	Radiography:	NO	Efficiency:	-
MAWT:	38	°C	Diameter: I.D.	159	mm	Stress Relief:	NO	Code Stamp:	U
MDMT:	-29	°C	Length: s/s	1753	mm	Ext. Coating:	YES	Position:	VERTICAL
Capacity:	-	m3	Overall Length:	1930	mm	Insulated:	NO	Support:	LEGS

Internal Coating:	NO	Type:	-	Thickness:	-	mm	Manway:	NO	Size:	-	mm
Internal Cladding:	NO	Type:	-	Thickness:	-	mm	Test Pressure:	-	-	-	kpa
Inspection Port:	YES	Size:	152	mm	-	mm	Location: #1	TOP HEAD	#2	-	-

	Type	Material	Thickness	Corrosion Allowance
SHELL	-	N/A	4.78 mm	0.61 mm
TOP HEAD	ELLIPTICAL	N/A	4.78 mm	0.61 mm
BOTTOM HEAD	Flat	N/A	4.78 mm	0.61 mm

Nozzle Description	I.D. #	NPS	Flange Rating	Type	Material	Thickness	Length
Inlet	-	51 mm	150 #	RFWN	SA-106B	3.9 mm	127 mm
Outlet	-	51 mm	150 #	RFWN	SA-106B	3.9 mm	127 mm

PROCESS DATA

Product Description:	NATURAL GAS	Service:	SWEET	-
Operating Pressure:	193 Kpa	Operating Temperature:	-	°C

PSV STATIC DATA

Tag Number:	-	Manufacturer:	MERCER	
Company I.D. #:	-	Model # / Type:	8114421036P	Equipment # : -
Serial Number:	HR-1857	CRN:	-	Code Stamp: UV NB
Inlet Size:	25 mm	Rating:	- #	Set Pressure: 517 Kpa
Outlet Size:	25 mm	Rating:	- #	Capacity: 301 SCFM
Location of PSV:	SIDE OF FUEL GAS SCRUBBER			

INSPECTION DETAILS

Inspection Reason:	CODE INSPECTION	Inspections Required:	VE	UT				
Inspection Test Plan:	-	Inspection Type Used:	VE	UT				
Last Inspection Date:	-	Next Inspection Type:	VE	UT				
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

A thorough inspection to verify the equipments integrity was done by VE and UT.
There were no rejectable defects observed at this time; the vessel can be recommended fit for service.
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 internal inspection performed at this time.
There was no internal NDE performed during this inspection.

W0# 6071632

EQ # 66046261 NO # 6068872

Conid ☒ Scanned ☒ Entered ☒ HDMS Linked ☒

RECOMMENDATIONS

The areas with paint defects should be properly prepared and touched up.

REPAIRS COMPLETED

FUEL GAS SCRUBBERS INSPECTION REPORT

(Metric)

Facility: **MARIE LAKE BOOSTER** Date: **September 3, 2008** Report #: **IR080903GENg**

INSPECTION OBSERVATIONS

NON COMPLIANCES ISSUED

INSPECTION DEFICIENCIES ISSUED

EXTERNAL VISUAL INSPECTION

The nameplate is in tact and legible.
The instrumentation and its tubing is in good working condition with no detectable leaks.
The pressure retaining welds are in tact with no evidence of deterioration or visible cracking.
The vessel support is securely bolted to the skid floor.
The anchor bolts are in fair condition.
The vessel's ground connection is through the skid's ground rod.
The vessel is protected by a PSV that is in fair condition.
The vessel is painted with some chips and scratches.
The piping and piping attachments are in fair condition with no detectable leaks.
The piping bolt up grading is B7 and 2H.
The attached piping is painted with no notable defects.

EXTERNAL NDE

NDE inspections were performed by Silvertip Inspection Services Ltd.
The UT values recorded on the vessel are above nominal.
See the attached NDE reports for more detailed information.

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 24, 08		
Vessel Inspection Interval:	Leave "As Is":	Change to:	PSV Inspection Interval:	Leave "As Is":	Change to:
5	Years	Years	5	Years	Years

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

Date: _____
Date: _____

FUEL GAS SCRUBBERS INSPECTION REPORT

(Metric)

Facility:	MARIE LAKE BOOSTER	Date:	September 3, 2008	Report #:	IR080903GENg
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NAMEPLATE

FUEL GAS SCRUBBERS INSPECTION REPORT

(Metric)

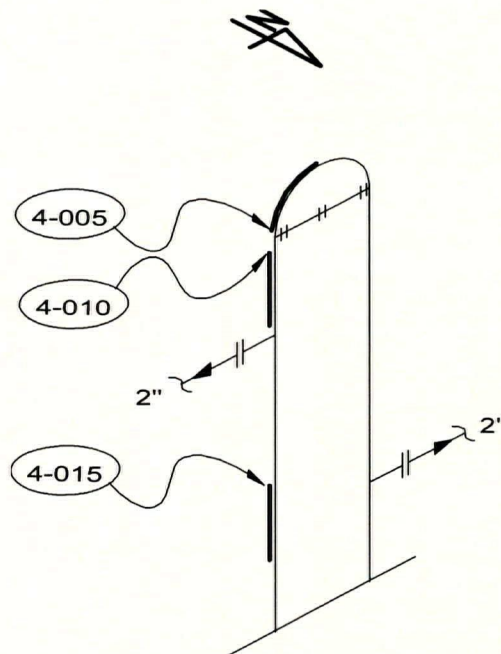
Facility:	MARIE LAKE BOOSTER	Date:	September 3, 2008	Report #:	IR080903GENg
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OVERALL VIEW

FUEL GAS SCRUBBER UT REPORT

FACILITY: MARIE LAKE BOOSTER		DATE: SEPTEMBER 03, 2008		REPORT #: IR080903GENg	
AREA SUPERVISOR: ROGER BUREAU				W.O. / C.C.# 70975	
STATIC DATA					
Alberta Reg. #:		CRN: M-8173.21		National Board #: 35902	
Equipment Number: 66046261		Notification #: 6068872		Vessel Class:	
Manufacturer: PERRY EQUIPMENT CORPORATION				Serial Number: 115343-19	
Equip. Description: FUEL GAS SCRUBBER				Location (LSD): 15-15-065-02W4	
Equipment Tag #: -		Year Built: 1999		Company I.D.#: BC-034756	
Province Installed: ALBERTA		Registration #: -		Skid / Building #: BC-034765	
MAWP: 1896 Kpa	Diameter: O.D. 168 mm	Radiography: NO	Nozzle Rating: - #	Position: VERTICAL	
MAWT: 38 °C	Diameter: I.D. 159 mm	Stress Relief: NO	Code Stamp: U	Support: LEGS	
MDMT: -29 °C	Length: S/S 1753 mm	External Coating: YES	Capacity: m3	Insulated: NO	
Internal Coating: NO	Thickness: mm	Internal Cladding: NO	Type: -	Thickness: mm	
		Material		Thickness	
		Corrosion Allowance			
Shell	N/A	4.78 mm		0.61 mm	
Top Head	N/A	4.78 mm		0.61 mm	
Bottom Head	N/A	4.78 mm		0.61 mm	
Nozzle Description	I.D. #	NPS	Flange Rating	Type	Material
Inlet	-	51 mm	150 #	RFWN	SA-105N
Outlet	-	51 mm	150 #	RFWN	SA-105N
					Thickness
					Length
					3.9 mm
					127 mm
					3.9 mm
					127 mm
PROCESS DATA					
Product Description: NATURAL GAS		Service: SWEET			
Operating Pressure: 193 Kpa		Operating Temperature: °C			



NOTES:

ALL VALUES ARE IN METRIC UNITS
FOR FITTINGS THE CORROSION ALLOWANCE IS
EQUAL TO 12.5% MILL TOLERANCE

S.O.B. = START OF BAND
E.O.B. = END OF BAND
LOW POINT= LOWEST READING IN THE BAND

TML	TML LOCATION		THICKNESSES			UT READINGS - POINTS						LOW RDG @ POINT	BELOW NOMINAL	BELOW MINIMUM
	ITEM DESC.		NOM.	C.A	MIN.	1	2	3	4	5	6			
4-05	TOP HEAD	B-T	4.8	0.6	4.2	5.0	4.9	5.0	-	-	-	2	-	-
4-10	TOP SHELL	T-B	4.8	0.6	4.2	5.0	5.0	5.0	5.0	4.9	4.9	6	-	-
4-15	BOTTOM OF SHELL	T-B	4.8	0.6	4.2	5.1	5.0	5.1	5.1	5.1	5.1	2	-	-

FACILITY Jackfish Creek CS	DATE August 22, 2002	REPORT # IR_020822_MKY- 16
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VESSEL STATIC DATA					
Prov. Insp. #	N/A	CRN	M-8173.21	Equip Tag #	N.B # 35902
Equipment Location (LSD)				15-15-65-02 W4M "Marie Lake South" Booster	Serial # 115343-19 ✓
Equipment Description				Fuel Gas Filter/ Separator	
Manufacturer				Peco	Year Built 1999
MAWP				275 psig @ 100 °F	MDMT -20 °F
CODE : UM <input type="checkbox"/> U <input checked="" type="checkbox"/> U2 <input type="checkbox"/> RES <input type="checkbox"/>				RT : 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>	
				ASME Sect VIII, Div 1	
Diameter 6"		Length (T/T) 70"		(OAL)	
Shell Mat'l		unknown		Thickness unknown Mm/ in	
Head Mat'l		unknown		Thickness unknown Mm/ in	
Nozzle Mat'l				Thickness unknown Mm/ in	
Internal Coating : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			Internal Clad : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
Manway : YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			Inspection Port : YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		
Nozzle Rating			lb ANSI		
Painted :			YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		
Insulated :			YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		

PROCESS DATA	
Product Description	Gas
Operating Pressure	6 psig
Operating Temperature	48 °F
Sweet <input checked="" type="checkbox"/> Sour <input type="checkbox"/> PPM:	

PSV STATIC DATA							
Tag / Serial No.	Location	Inlet	Outlet	Set Pressure	Capacity	Manufacturer	Model / Type
"HR1857"	On piping	1"	1"	75 psi	301 scfm	Mercer	814421036P

Serviced by H & R Valve

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. # 601917	
Inspection Task List #				Inspection Type		Inspection Reason No inspection history	
Inspection Techniques Required				Next Inspection Type		Due Date	
VE	VI	RT	UT	MT	PT	PT	TT
X			X				
Outstanding Repairs							

INSPECTION SUMMARY
Vessel has excellent external appearance.
No significant findings. Vessel is a component of compressor package "# FH 107".
Vessel is suitable for continued service.

RECOMMENDATIONS

REPAIRS COMPLETED			
Object Name	Cause	Damage	Repair Activity

VESSEL STATUS			
Integrity Status		<input checked="" type="checkbox"/> Suitable for Continued Service <input type="checkbox"/> Immediate Repairs Required <input type="checkbox"/> Replace	
Inventory Status		<input checked="" type="checkbox"/> Inservice Fully Utilized <input type="checkbox"/> Future Repairs Required <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"/>			

PRESSURE VESSEL INSPECTION REPORT

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FACILITY	Jackfish Creek CS	DATE	August 22, 2002	REPORT #	IR_020822_MKY- 16
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INSPECTION OBSERVATIONS**NONCOMPLIANCES OR INSPECTION DEFICIENCIES ISSUED**

None.

EXTERNAL VISUAL INSPECTION

The vessel has excellent external appearance. No visible corrosion.

Foundation is in good condition.

Piping and nozzles are in good alignment and are well supported. Bolts are secure.

The bolts for the removable top are in good condition.

No signs of leakage.

EXTERNAL NDE EXAMINATION

Ultrasonic wall thickness measurements were performed at random locations.

No significant findings, current wall thickness is acceptable.

INTERNAL VISUAL INSPECTION**INTERNAL NDE EXAMINATION****PRESSURE TEST**Test Completed ☐ Yes ☐ NoTest Acceptable ☐ Yes ☐ No

Test Report #

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 *Manley Yuen*Inspection Company **Ramtech Consulting Inc.**Date **August 22, 2002****LEAD INSPECTOR'S ACCEPTANCE & SCHEDULE CONFIRMATION**Lead Inspector **Greg Murray**Signature *Greg Murray*Date *Oct 22/02*Vessel Inspection Interval **5 years**Leave "as-is" ☐

Change to

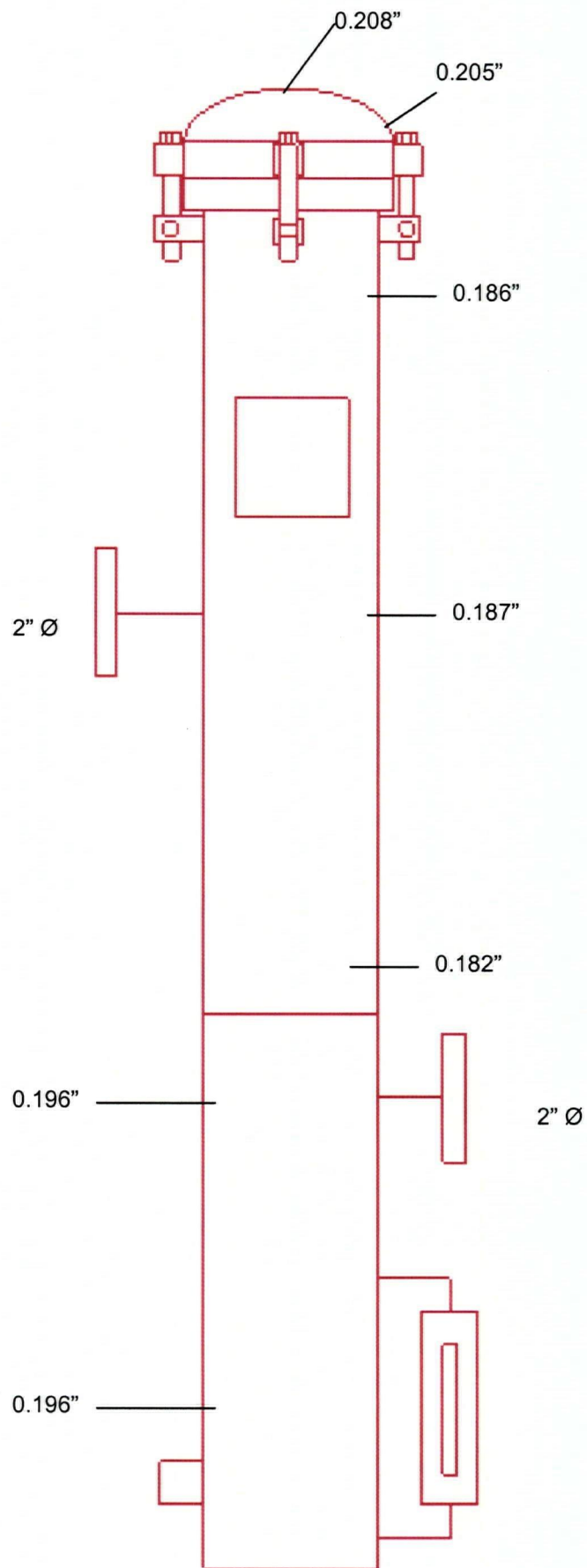
PSV Inspection Interval **5 years**Leave "as-is" ☐

Change to

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

Date

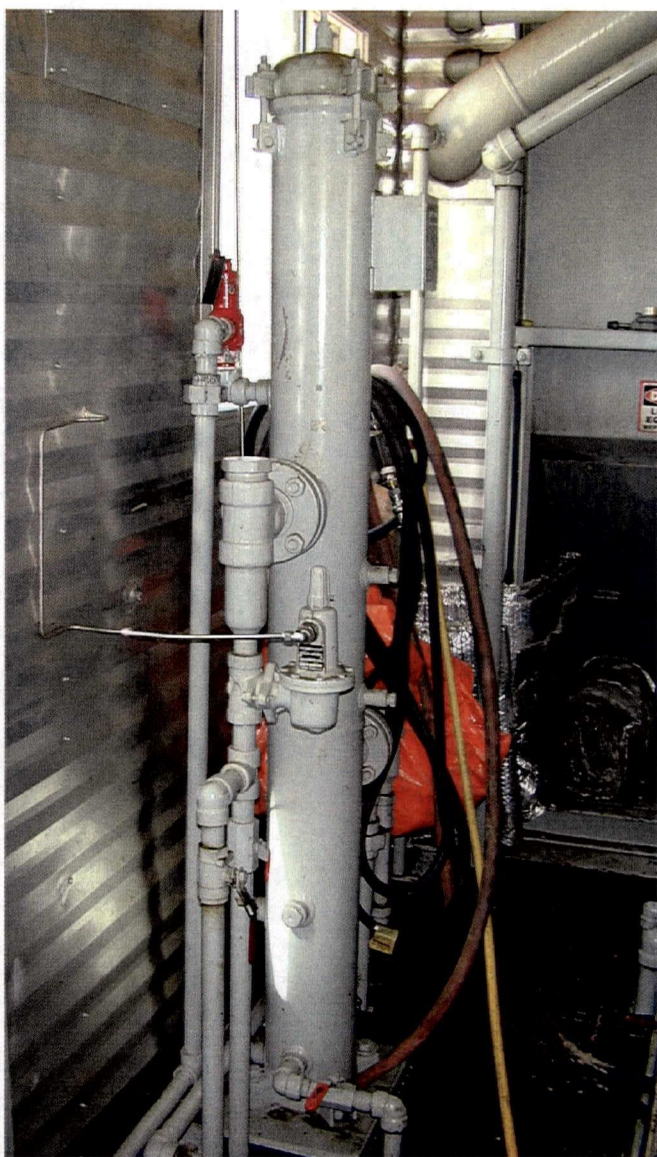
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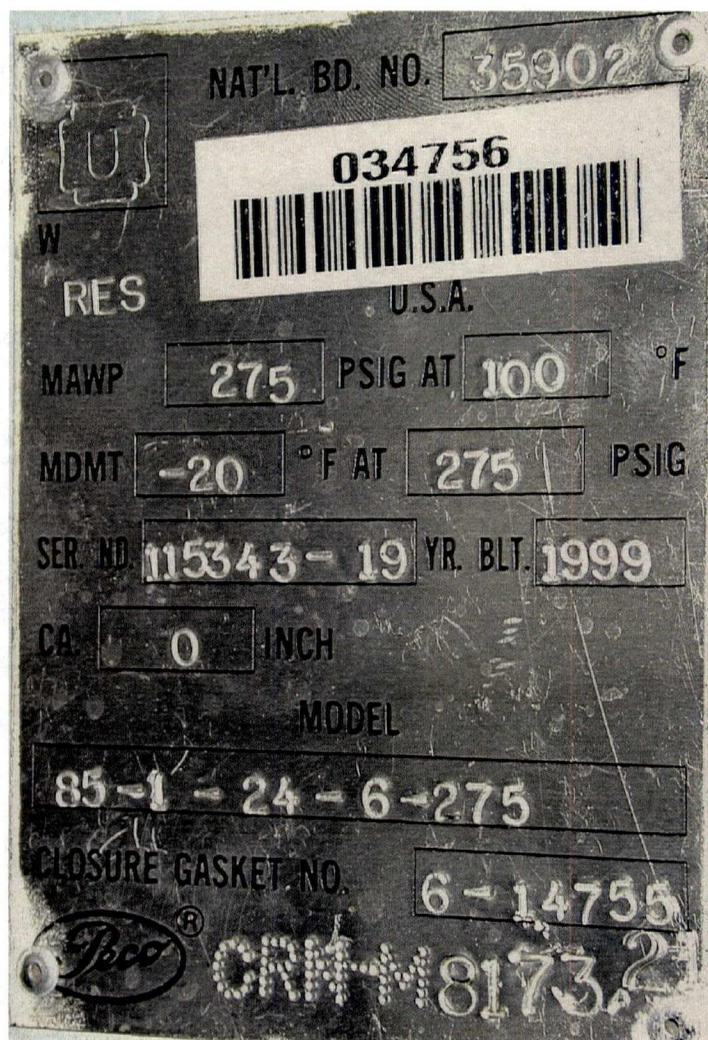
Jackfish Creek CS "Marie Lake South" Booster
100/ 15-15-65-02 W4M



Collicutt Hanover compressor package FH 107



Fuel gas filter s/n 115343-19



Jackfish Creek CS "Marie Lake South" Booster
100/ 15-15-65-02 W4M



CERTIFIED BY		
PRESSON		
{U}	2577436	
W		
RT1		
CONTACTOR		SERIAL NO.
4624-20		
MAWP	DESIGN TEMP.	MIN. TEMP.
1415PSI	150F	-20F
9756KPA	66C	-29C
CAN. REG. NO.	AG NO.	DATE FABRICATED
H3600.2		AUG789
CORR. ALLOW.	SHELL THICKNESS	SHELL MATERIAL
.0625	.875	SA51670
WEIGHT	HEAD THICKNESS	HEAD MATERIAL
7469LBS	.833	SA51670
034787		

Dehy skid
Glycol Contactor A 2577436

Inspected by RTD in Dec. 2001