

1-9-43-13-W5M

Contact: Kevin Schatz

Office #:

Cell #: 1-403-815-3801

Fax #:

Authorizing Body: N/A

Box 3694 Vermilion, Alberta

T9X 2B7

Work Order #: N/A

Hazard Assessment #(s): N/A

Safe Work Permit: N/A Additional Ref. #:N/A

Gas Permit #: N/A

Date: 14-Mar-2019 http://www.kenilwo

Direct Dispatch: 1-866-744

Fax: (780) 853-5320

Description:

Phone: (780) 853-5340

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			nformation			
Type: Eclipse Conventional			Fuel Type:	Type: Raw Gas		
Size:	3"		Orifice Jet:	N/A		
Nozzle Type:	Stick Type		Orifice Spud:	E		
Barrel Typ	e / Combina	ation:	Max. Press.:	14	PSI	
Sleeve With Co	mpound		Min. Press.:	5	PSI	
Pilot Type/Style:	ACL		Pilot Press.:	5	PSI	
Burn Back	Protection:	No	Pilot Orifice:	70	_	
			CSAB 149.3 - 10 Co	mpliant:	Yes	
BMS Type:	ACL 5100		Electrical Spe	c: 24VDC		
BMS Serial #:	021312-09		Mod Bu	ıs: N/A		
Pre Purge Time:	N/A sec.		General Alarm: Lock	Out		
Start w/ Power:	No		Hi Temp Alarm: Lock	Out		
Remote Start:	No		Lo Level Alarm: Lock	Out		
Soft Start:	No		Hi Gas Alarm: Lock	Out		
Low Fire Start:	Yes	Lo Gas Alarm: Lock Out				
Low Fire Timer:	10sec sec.		CSAB 149.3 - 10	Complian	t: No	

Firetube Information							
Discharge Design:	3 piece miter		Internal Skin Temperatures				
Tube Diameter:	20	inches		N/A C			
Tube Length:	24	feet					
Stack Size:	20	inches	N/A C	N/A C	N/A C		
Stack Height:	20	- feet	- IN/A C	IN/A C			
		-		24/4 0			
				N/A C			
Orientation:	Horizontal		Highest	Skin Temp			
Return Side:	No			rom Nozzle:	N/A C		
Internal Baffle:	No	_					
Stack Cap:	Yes	-					
Stack Dampener:	No	-					
Stack Therm.:	No	-	Tube Co	ndition:	1		
Impingement:	No	_					
Tube Distorted:	No	-	Klinker E	Buildup:	No		



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Middle Line Heater U-5100

Phone: (780) 853-5340

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Firebox Information

Authorizing Body: N/A

Type: Wenco Size: 38"

Serial #: 0612-662

Condition of Seals / Gasket: Fair

Arrestor Size: 38 Number: 1

Hole Size: .063 Arrestor Cond.: Fair

Flashback Test: No When:

CSAB 149.3 - 10 Compliant: Yes

Vessel Information

Type: Line Heater Size: 72" x 24'

Serial #: 12-032-CB

Fluid Temp: N/A BS+W:N/A%

Fluid Level: N/A H2O Level: N/A

Inlet Temp.: N/A Thermowell: N/A

Discharge Temperature: N/A

H2O Discharge Temperature: N/A

Valve Train Information

Main Regulator: Fisher Main ESD: ACL POC

627R Pilot ESD: ASCO

Pilot Regulator: Fisher 67CFR

Proof of Closure: Yes

Temp. Control: Kimray T12 Set @ 40c C

PRV/PSV Size: N/A SN#:N/A

Hi Temp Shutoff: CCS Set @ 90c C

Flame Fail Type: Ionization Set @ 3.8

Thermocouple: N/A

Lo Fire Solenoid: Yes

Orifice Plate: N/A **BTU Input:** N/A

Soft Start: N/A

Lo Level Shutoff: Linc

Set @ Surge

Hi Level Shutoff: N/A Set @ N/A

Set @ 17.5Psi L. Press. Switch: UE

Set @ 2.5Psi H. Press. Switch: UE

CSAB 149.3 - 10 Compliant: Yes

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After Service

Burner Settings			Internal Skin Temperatures		
Orifice Jet: N/A			N/A C		
OrificeSpud: E	OrificeSpud: E				
Main Fuel: N/A	Main Fuel: N/A			N/A C	N/A C
14Psi Max P	SI 5Psi	Min PSI			
2nd Fuel: N/A	2nd Fuel: N/A			N/A C	
N/A Max P	SI N/A	Min PSI		t Skin Temp from Nozzle: _	N/A C
Max BTU - Current: 2.02mm					
Potential: 2.5mm					

	Before	High	Low
Date		14-Mar-2019	14-Mar-2019
Time		09:47:45 AM	09:47:47 AM
O2 (%)		7.21	11.01
CO (PPM)		0	0
PRS		14Psi	5Psi
Eff (%)		73	71
XAir (%)		79	132
CO2 (%)		7.85	6.95
NO (PPM)		43	38

	Before	High	Low
NO2 (PPM)			
NOx (PPM)		45	41
SO2 (PPM)			
Flue (C)		403	301
Inlet (C)			
Natural Gas			
Raw Gas		E	E
Propane			
Flue CFM			

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Pre-Service Comments

- Found pilot solenoid installed backwards
- Re-tubed hi pressure switch to downstream of control valve
- No appliance vbalve was installed so we cut one in
- Finished the shutdown wiring and tested shutdown circuit

After-Service Comments

- Field Commissioning Commissioning of process heater assembly
- Field Commissioning Verified all fuel gas supply regulators have correct orifice, spring range and pressure correctly adjusted
- Field Commissioning Verified correct fastening and alignment of main burner and pilot burner
- Field Commissioning Verified correct safety relief valve is installed in gas supply system
- Field Commissioning Verified valves are installed correctly checking flow direction
- Field Commissioning Verify gas line is properly marked and identified
- Field Commissioning Verifiy high temperature trip calibration
- Field Commissioning Verify low bath level trip function
- Field Commissioning Verified correct bath temperature set-point
- Field Commissioning Verified bath is to correct level
- Field Commissioning Verified all ports to firebox are appropriately sealed and the flame arrestor is in good condition
- Field Commissioning Purge process heater gas lines and proceed with start up



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Birchhill Canada

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N/A

Gas Permit #: N/A **Date:** 14-Mar-2019

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Safety Checklist	
Burner Adjusted as per Manual:	Yes
Pri./Sec. air dampener secured:	Yes
Firebox Closed - good seal made:	Yes
Regulator Set & Secured:	Yes
Any System Deficiencies:	No
Owner Notified of Actions Taken:	Yes
Site Cleanup Complete:	Yes
Tools & Equipment Stored:	Yes
All Parts Accounted For:	Yes
All Reports Complete:	Yes

Authorizing Body: N/A



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Field Commissioning - Verified burner management system provides correct firing sequence for pilot and main burner, with stable flame high and low conditions

Field Commissioning - Verified gas is turned off on loss of flame detection

Field Commissioning - Verified high fuel gas pressure trip function

Field Commissioning - Verified low fuel gas pressure trip function

Field Commissioning - Verified no flame present at bath temperature set-point (Run/stop function)

Field Commissioning - Verify burner orifice size and calculate maximum current BTU input (See burner setting on page 1)

Field Commissioning - Adjust and set burners

Field Commissioning - Verify correct heater emmissions from heater stack with burner fueled by raw gas, see combustion analyzer strips

Field Commissioning - Post maximum and minimum burner setting, fuel types, stack temperatures and firetube internal skin temperature onto the firebox via service sticker

Field Commissioning - Verified there are no leaks on bath or gas lines after warm up

Field Commissioning - Verify process heater system is built to P and ID's

Technician: Stan Neu Assistants: Chris Graham



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