



Pressure Equipment Integrity Management System External Inspection Form

NME Form F01-03
Version 002.06
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Owner: Energera District / Facility: Rented (Canada) / Acheson Yard
Location (LSD) ♦: 11551 Bevington Road (Acheson) Surface Location: _____

Vessel Data

A Number ♦: 705779 Serial Number ♦: 231054V1
CRN ♦: T2005.2 Vessel Type: Coil #1
Description ♦: LH01 Line Heater (Primary Coil) Skid / Process: LH01/LH02 Line Heaters
Tag No: LH01 Current Status: In Service

Course #1 (Main)

Orientation: Pipe Coated? No Type: _____
Fluids: Natural Gas Anodes? No Type: _____ Quantity: _____
Sour? ♦ No Hand Holes? No
Manufacturer ♦: Fourstar Resources Inc. Manway? No Size: _____
MAWP ♦: 3270 psi MAWP Temp: 300 °F MDMT: -50 °F
Shell Material: SA-333-6 Nom. Shell Thick: 0.531 in
Head Material: _____ Min. Head Thick: _____
Diameter: 4.5 in OD Length: _____
Year Built ♦: 2023 Installation Date ♦: Jan 1, 2024 Corrosion Allow: 0.0625 in
Volume: _____ Stress Relieved? No
Radiography: 10% ABSA Grade: 1

Course #2

Description: Line Heater (Secondary Coil) Course Type: Coil #2
Fluids: Natural Gas Sour? No
MAWP: 3270 psi MAWP Temp: 300 °F
Tube/Shell Material: SA-333-6 Nom. T/S Thick: 0.531 in
Head Material: _____ Min. Head Thick: _____
Diameter: 4.5 in OD Length: _____

PSV #1 Course # _____ PSV Location or Position: _____
Serial No ♦: _____ Model No: _____
Set Pressure ♦: _____ Ports / CRN: _____
Capacity ♦: _____ Manufacturer: _____
Service date ♦: _____ By: _____ Car Seal #: _____
Block Valve? ♦ Install Date: _____ Tag no: _____

PSV #2 Course # _____ PSV Location or Position: _____
Serial No: _____ Model No: _____
Set Pressure: _____ Ports / CRN: _____
Capacity: _____ Manufacturer: _____
Service date: _____ By: _____ Car Seal #: _____
Block Valve? Install Date: _____ Tag no: _____

Comments: Coil 1 is 4" Sch 10 piping, CL1500 flanges (0.531" nominal). Coils 1 and 2 are connected.



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A#: 705779

Vessel Description: LH02 Line Heater (Primary Coil)

Location (LSD): 11551 Bevington Road (Acheson)

External Visual Inspection - Vessel

	Okay	Comment		Okay	Comment
Name Plate Accessible:	☒		Paint/Coating Condition:	☒	
Piping Connections Made:	☒	Bolted/threaded	Insulation Condition:	☒	Shell insulated
Inspection Access (i.e. skirt):	☒		External Surface Condition:	☒	
Bolting Check:	☒		Foundation:	☒	Welded to trailer
Leaks/Drips/Seeping:	☒		Bending/Warping/Distortion:	☒	
Dents:	☒		Cuts/Gouges:	☒	
Ladders/Walkways:	☒		Ground Wire Connection:	☐	Field installed
Condition of Gauges:	☒	P1: Instrumentation	Other Equipment:	☒	Firetube, burner, fuel gas coil, shell
Observed operating pressure (shell):		☐ psi ☐ kPa	Gauge Range (shell):		☐ psi ☐ kPa
Observed operating pressure (tube):		☐ psi ☐ kPa	Gauge Range (tube):		☐ psi ☐ kPa
Observed operating temperature (in):	70	☒ °F ☐ °C	Gauge Range (in):	50 to 300	☒ °F ☐ °C
Observed operating temperature (out):	70	☒ °F ☐ °C	Gauge Range (out):	50 to 300	☒ °F ☐ °C

Detailed Observations/Notes/Comments:

Installation inspection
Unit out of service at time of inspection

External Visual Inspection - Piping

	Okay	Comment		Okay	Comment
Bolting Check:	☒		Insulation Condition:	☐	N/A
Paint/Coating Condition:	☒		Check for dead legs:	☒	
Leaks/Drips/Seeping:	☒		Bending/Warping/Distortion:	☒	
Dents:	☒		Cuts/Gouges:	☒	
Supports:	☒		Misalignment:	☒	

External Visual Inspection - PSV(s)

	Okay	Comment		Okay	Comment
PSV Piping Check:	☐		Flare Line Slope Check:	☐	
Damage/Leaks:	☐		Seals Intact:	☐	
Weather Protection:	☐		Lifting Lever Acceptable:	☐	

	Vessel MAWP		PSV Set Pressure	PSV Capacity	PSV Size	Last Service Date	Serviced By	Block Valve Present?	Locked Open?	Reportable?
Shell		#1								
Tube		#2								

PSV Check: ☐ OK - PSV Set pressure is not greater than vessel MAWP

☐ PSV is set too high. Reset PSV to vessel MAWP.

Detailed Observations/Notes/Comments:

Per Energera maintenance, process fluid/gas is protected coming into the coil. No PSVs installed on line heater.



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A#: 705779

Vessel Description: LH02 Line Heater (Primary Coil)

Location (LSD): 11551 Bevington Road (Acheson)

Action Item(s) Identified? ☐ Yes ☒ No If yes, indicate required work and Field Tag #:

Field Tag #: _____

The scope of this external inspection is restricted to the items detailed above and forms part of a thorough integrity assessment for this equipment. Results of this inspection have determined the external condition of this equipment to be:

- ☒ Acceptable
- ☐ Acceptable with the identified action items resolved before the associated action item's "Required By Date".
- ☐ Not Acceptable until the identified action items are resolved.

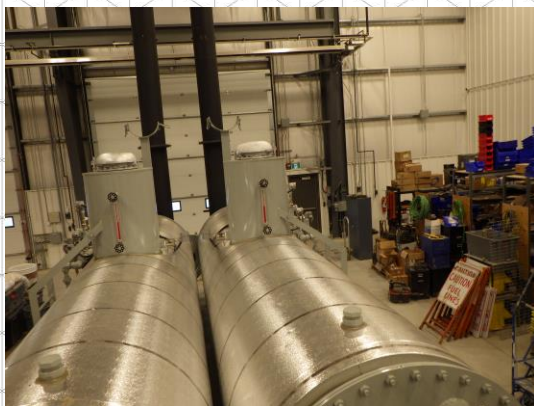
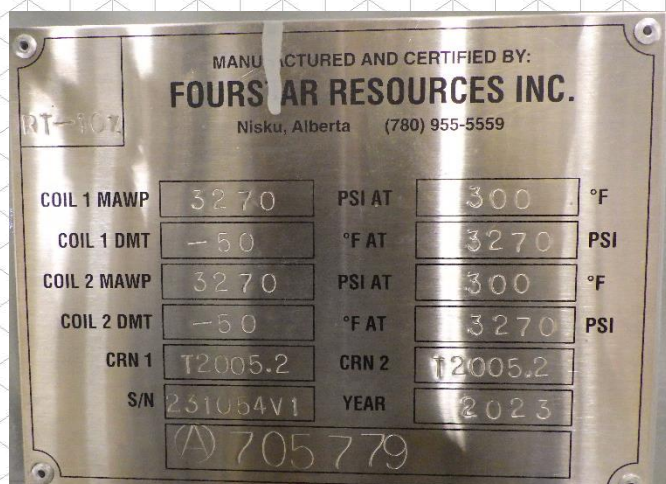
Inspector Name: Morgan Goruk

Inspector Company: Northern Materials Engineering

Inspector Signature: Original signed by Morgan Goruk

Inspection Date: Nov 30, 2023

Sketch / Image Area



TITLE

DRAWN BY

DATE

Documentation

Documents Acquired:

☒ Manufacturer's Data Report (U-1A) ☐ Jurisdictional Operating Permit / Licence

Name Plate Information is correct?

☒ Yes ☐ No ☐ To be completed through routine ABSA reporting process

Design is registered in province (CRN)?

☒ Yes ☐ No, Generate an Action Item and arrange for design registration

NMEID: VES104104

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A#: 705779

Vessel Description: LH02 Line Heater (Primary Coil)

Location (LSD): 11551 Bevington Road (Acheson)

Service Conditions

Process Fluids Description:

☐ Sour☐ Produced Water☐ OWE☐ Solids☒ Condensed Water☐ Propane☐ Air☐ Frac. Sand☐ Liquid Hydrocarbon☒ Glycol☒ NG☐ _____

Potential Mode(s) of Deterioration:

☒ Pitting☐ Crevice☒ High Temp☐ Sulphidation☒ General Corrosion☐ Erosion☐ Cavitation☐ Under Deposit Corr.☐ External Atm. Corrosion☐ Under Insulation☐ Mechanical DamageCracking>☐ SCC☐ Hydrogen☐ Fatigue☐ Other

Area(s) Most Likely to Deteriorate:

☒ Heads☐ Bottom Head☒ Nozzles☐ Welds☐ Attachments☒ Shell (lower)☒ Shell (Upper)☐ Shell (other)☒ Coil☒ Piping (inlet)☒ Piping (outlet)☐ Piping (drain)

Current Mitigation Program?

☐ Yes ☒ No

(if yes, describe)

Other Considerations?

☐ Yes ☒ No

(if yes, describe)

Additional Process Monitoring

☐ Yes ☒ No (if yes, describe in area below or attach details)

Fluids Sample (Type / Frequency / Analysis Req'd)

Corrosion Monitoring (Coupons / Probes)

Other (describe)

Inspection History

(Complete this section if the vessel is new and a baseline inspection was completed or if the vessel is used)

Inspection Company:

Last Inspection Date:

Inspection Plan

Assigned Grade: 1

Previous Grade: _____

AB-506 Category: Indirect Fired Line Heaters (UPV)

(if Assigned Grade differs from Previous Grade explain in **Notes** section below)

Activity Required

Yes

No

Interval
(years)Due Date
(dd / mmm / yy)

Comments / Justification

Offline Internal Visual

☐☒

na

/ /

Discuss at Workplan

UT Inspection

☒☐

5

01 / Jan / 29

Crack Inspection

☐☒

/ /

Additional Inspection(s)

☐☒

/ /

External Visual

5

30 / Nov / 28

PSV service interval

na

/ /

Notes

Complete if Assessor is different than Inspector

Assessor Name:

Company:

Assessor Signature:

Assessment Date:

Report Certification

Report Certified By (signature): Original signed by Evan Ficko

Certificate No: 000775

ISI

NMEID: VES104104

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