

1.1-FRM-001VS Visual External Inspection Report

| | | |
|-----------|---|--|
| Report #: | PSV Service Report Avail. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N MDR Avail. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N UT Verified <input checked="" type="checkbox"/> Y <input type="checkbox"/> N | <input checked="" type="checkbox"/> Installation <input checked="" type="checkbox"/> External <input checked="" type="checkbox"/> Internal |
|-----------|---|--|

| | | | | | | | |
|-----------------|---|---------|-------------|--|---------------------------|----------------------|---|
| Date: | 4/16/2022 | WO #: | V-0061 | Proc. Used: | Cat 1 - Unfired Separator | Rec. Insp. Interval: | 4 |
| Inspected By: | Dwight Colp ISI-PVPP Cert# 000692, API 510 #43558, API 570 #45288 | | | Radiography: | None | | |
| Client: | Lyon's Production Services | | | Heat Treatment: | No | | |
| Coordinator: | Dave Macdonald | | | National Board Number: | | | |
| Region: | Alberta N.E. BC | Area: | Peace | Notes: PSV Service Report reviewed by inspector. Current and prior UT report reviewed by inspector. PSV Removed for Service. | | | |
| Facility: | GP Yard | | | | | | |
| Location, LSD | Portable | | | | | | |
| Description: | <input checked="" type="checkbox"/> Vessel <input type="checkbox"/> Exchanger <input type="checkbox"/> Tank <input type="checkbox"/> Heater | | | | | | |
| Service Fluid: | <input type="checkbox"/> Sweet <input checked="" type="checkbox"/> Sour Fluid Name: Fuel Gas | | | | | | |
| Unit Name / #: | SS-742 | Equip#: | SS-742 | | | | |
| Equip. Name: | Fuel Gas Scrubber SS-742 | | | | | | |
| Jurisdiction #: | 1006.1498 | CRN: | OH2299.2134 | | | | |
| Manufacturer: | Lo Tech Manufacturing | | | | | | |
| Year Built: | 2004 | S/N: | 1006.1498 | | | | |

| Components: | Diameter | Length | Material | Nominal t | CA | Comment |
|-------------|----------|----------|------------|-----------|----|---------|
| Shell: | 6" NPS | 36" | SA-106-B | 0.280" | | |
| Head: | 6" NPS | Pipe Cap | SA-240-WPB | 0.280" | | |
| Channel: | | | | | | |
| Tube: | | | | | | |
| Other: | | | | | | |

PSV Data: PSV Capacity Verified: ☐ Y ☒ N Block Valve(s) Installed: ☐ Yes ☒ No Car-sealed Open: ☐ Yes ☐ No ☒ N/A

| Zones: | MDMT | Design T | MAWP | Set Press | Tag# | Model | Manf. | PSV CRN | Serial Number | In. | Out. | Capacity | Serv. Co. | Serv. Date |
|-------------|------|----------|---------|-----------|-------|------------|--------|------------|---------------|-----|------|----------|-----------|------------|
| Shell Side: | 20 F | 100 F | 150 PSI | 150PSI | ST204 | B2E4351341 | Taylor | 0G01316.2C | 043190-35 | 1" | 1" | 582SCFM | Unified | 7/12/2021 |
| Tube Side: | | | | | | | | | | | | | | |
| Other: | | | | | | | | | | | | | | |

Orientation: ☐ Hor. ☒ Ver. **Foundation:** ☐ Concrete ☐ Gravel ☐ Timbers ☐ Steel ☒ Other: Skid Condition: Good

| | | |
|-----------------|--|------------------------|
| Support: | <input type="checkbox"/> Saddle: <input checked="" type="checkbox"/> Seal-welded <input type="checkbox"/> Free to move | Condition: No Concerns |
| | <input type="checkbox"/> Skirt: <input type="checkbox"/> Free of debris Comment: | Condition: |
| | <input type="checkbox"/> Hangers: <input type="checkbox"/> Secure Comment: | Condition: |
| | <input type="checkbox"/> Other (Specify): | Condition: |

| | | |
|-----------------|---|--|
| Overall: | General Condition: Good <input type="checkbox"/> Dead Legs Exist | Electrical Grounding: <input type="checkbox"/> None <input checked="" type="checkbox"/> Indirect <input type="checkbox"/> Direct <input type="checkbox"/> Secure |
| Ext. Surface: | <input checked="" type="checkbox"/> Painted <input type="checkbox"/> Fire-proofed <input type="checkbox"/> Cladded <input type="checkbox"/> Insulated <input type="checkbox"/> Other: | Condition: No Concerns |
| Ext. Fixtures: | <input type="checkbox"/> Ladder <input type="checkbox"/> Platform(s) <input type="checkbox"/> Other (Specify): | Condition: |
| Int. Surface: | <input type="checkbox"/> Coated <input type="checkbox"/> Weld Overlay <input type="checkbox"/> Cladded <input type="checkbox"/> Lined <input type="checkbox"/> Thermal Sprayed | Condition: |
| Int. Fixtures: | <input type="checkbox"/> Baffle <input type="checkbox"/> Vortex Breaker <input type="checkbox"/> Float <input type="checkbox"/> Weir <input type="checkbox"/> Impingement plate | Condition: No Concerns |

| | | | |
|-----------------|--|---|------------|
| Nozzles: | <input type="checkbox"/> MW <input type="checkbox"/> Inspection port only MW Size: | <input type="checkbox"/> Davit arm: <input type="checkbox"/> Greased <input type="checkbox"/> Double-nutted | Condition: |
| | <input type="checkbox"/> Reinforcement pads used <input type="checkbox"/> Weep holes visible <input type="checkbox"/> No evidence of weeping | Comment: | |

| Piping: | | Well-coated | Proper joints | Free of leaks | Proper supports | Fluid is identified | Flow dir. shown | Drains properly | Comments: |
|---------|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|-------------------------------------|---|
| | <input checked="" type="checkbox"/> PSV piping: | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | PSV is mounted on Piping <input checked="" type="checkbox"/> or Vessel <input type="checkbox"/> |
| | <input checked="" type="checkbox"/> Inlet piping: | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | <input checked="" type="checkbox"/> Outlet piping: | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | <input checked="" type="checkbox"/> Drain piping: | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| | <input checked="" type="checkbox"/> Instrument piping: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |

| | | |
|----------------|--|----------|
| Valves: | <input checked="" type="checkbox"/> Manual isolation valves: <input checked="" type="checkbox"/> Free from leaks | Comment: |
| | <input type="checkbox"/> Automated control valves: <input type="checkbox"/> Free from leaks | Comment: |
| | <input checked="" type="checkbox"/> Vents and/or drains: <input checked="" type="checkbox"/> Properly plugged | Comment: |

| | | | |
|----------------|--|----------------|------------------------|
| Gauges: | <input checked="" type="checkbox"/> Pressure: Range: 0 - 200 PSI | Reading: 0 | Condition: No Concerns |
| | <input type="checkbox"/> Temperature: Range: | Reading: | Condition: |
| | <input type="checkbox"/> Sight Glass Level: | Reading: Empty | Condition: No Concerns |

| | | |
|-----------------------------|----|--|
| Recommended Actions: | 1. | |
| | 2. | |
| | 3. | |

Summary: The vessel exterior and the associated piping are considered to be in Good condition.

Additional notes are attached: ☐

Item ☒ is suitable for service.

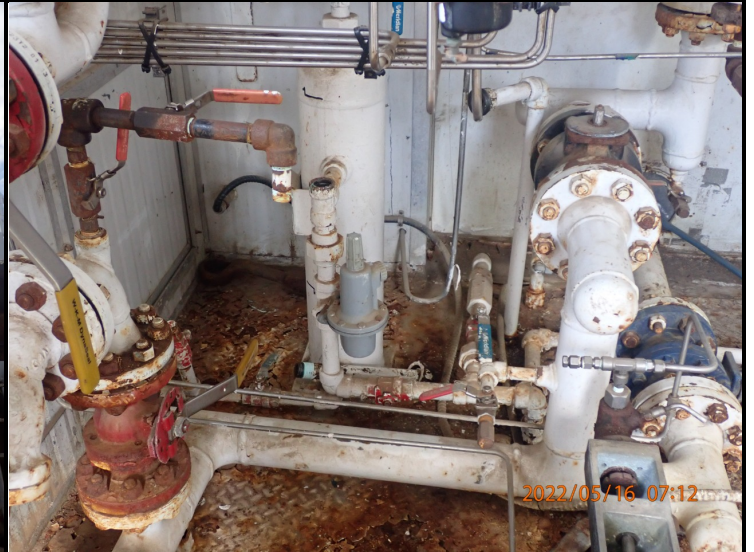
☐ is **NOT**

Inspector's Signature: _____

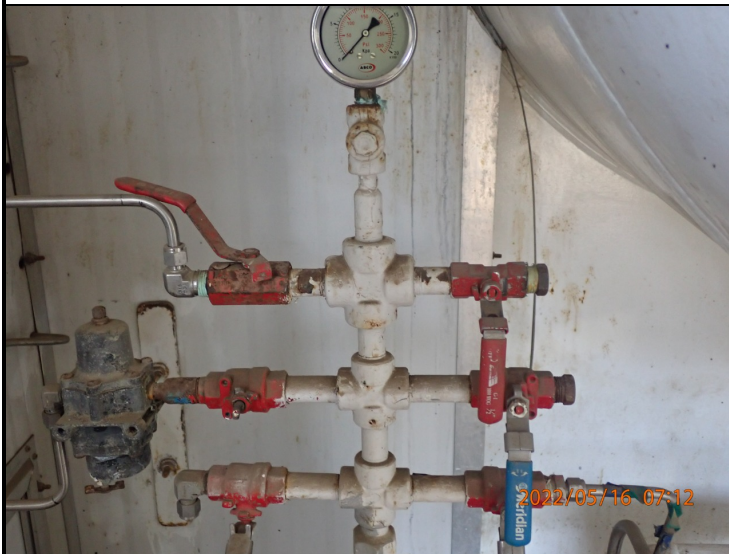
PHOTOS



Unit Overview



Vessel Overview



Outlet Piping



Vessel Nameplate



Drain Piping



Inlet Piping



PRV INSPECTION AND TEST REPORT

BRANCH: Grande Prairie

UVL ID#: 81340G

Work Order: W15005780

Customer PO#:

Customer: LYONS PRODUCTION SERVICES LTD
Facility: GRANDE-PRAIRIE LSD: SS-742
A#: Vessel SN:
Cust. Ref.: Valve PO:
Cust. WO#: Cust AFE#:

Date: 05/12/2022
PSV Location:
Cust Id:
PO LINE#:
Cost Centre#:

VALVE DATA

Man.: TAYLOR Model: 82E4351341 Serial: 039453-17 Seat: SOFT
Conn. Threaded Inlet: 1" MNPT Orifice: E Outlet: 1" FNPT Vacuum:
Set Press. 150 PSI Back Press.: N/A PSI CDTP: N/A PSI Temp: 70 F Cap: 582 SCFM
Lift Lever ☐ Cap Assembly: Closed RFID: Code Symbol: UV CRN#: 0G01316.2C

CUSTOMER INSTRUCTIONS

Instructions: Full Service Pretest Required? ☒ Reset Required? ☐

CONDITION AS RECEIVED

Visual Condition: Fair Data Plate Condition: OK Date of last service: 05/2019
Seal Condition: Top: Intact Bottom: N/A Insignia: UVL Fittings Attached: Inlet: ☐ Outlet: ☐
Inlet: Rusty Inlet Plugged: ☐ Outlet: Rusty Outlet Plugged: ☐ Initial Insp. Signoff: Don Meneses

PRETEST 1

Simmer: 157 PSI Set Press: 161 PSI Reseat: 142 PSI Leakage: 3 BPM Test Gauge: GP5K-1/2
Tested By: Duane Groth Pretest Comments:

PRETEST 2

Simmer: Set Press: Reseat: Leakage: Test Gauge: GP5K-1/2
Tested By: Pretest Comments:

COMPONENTS INSPECTION

(0 Like New / 1 Minor / 2 Medium / 3 Major)

| ITEM | CLEAN | OLLY | RUSTY | CARBON | PITTED | CORRODED | SCALE | VIBRATION | GROOVED | DENTED | GALLING | GOUGED | OTHER | Machined | Lapped | Polished | Replaced | Next Service | Replace | COMMENTS |
|--------------------------------|-------|------|-------|--------|--------|----------|-------|-----------|---------|--------|---------|--------|-------|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|---------|----------|
| DISC | | | 1 | | | | | | 1 | | | | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| NOZZLE | | | 1 | | | | | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| CAP-LEVER ASSY | | | 1 | | | | | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| COMP SCREW and LOC | | | 1 | | | | | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| AS FOUND: .29MM AS LEFT: .29MM | | | | | | | | | | | | | | | | | | | | |
| SPRING and BUTTONS | | | 1 | | | | | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| SPINDLE / STEM | | | | | | | | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| STEM RETAINER | | | | | | | | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| DISC HOLDER | | | | | | | | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| GUIDE / UPPER RING | | | 1 | | | | | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| LOWER RING | | | | | | | | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| RING PIN(S) | | | | | | | | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| BELLOWS | | | | | | | | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| GASKET / SEALS | | | 1 | | | | | | | | | | 2 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | TORN |
| CONNECTION ENDS | | | 1 | | | | | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |
| OTHER | | | | | | | | | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |

DISC: : N/A ACT - NOZZLE: N/A ACT - SPRING NUMBER: NO#
Disassembly: DJ McBrearty Inspection: Duane Groth Reassembly: DJ McBrearty

FINAL TEST

Test Medium: Air Simmer: 147 PSI Set Pressure: 150 PSI
Reseat: 110 PSI Leakage Acceptable: ☒ B.P. Test: 60 PSI Vacuum:
ADJ. RING SETTING (NOTCHES): Upper: Lower: Test Gauge: GP5K-1/2 Set Press Def: POP
Tested by: Duane Groth Date Final Tested:

FINAL INSPECTION:

SEAL: Top: ☒ Bottom: ☐ End Protectors Installed: ☒ Painted: ☒ Palletized: ☐ Ship Container: ☒ Flex Gaskets Supplied: ☐

Final Inspection: DJ McBrearty Customer Inspection:

Comments: - SERVICE RATING: ROUTINE

PSV Service Reports reviewed, Passed Pre-pop

Contract Chief Inspector - Dwight Colp API 510 #43558, ABSA ISIPV-PP #000692





| | | | |
|-------------------------------|----------------------------|--------------------------|----------------------------------|
| Location Name: | Grande Prairie AB | LSD: | Portable |
| Jur #: | OH2299.2134 | Equipment/Tag No. | SS-742 |
| Equipment Description: | Fuel Gas Scrubber | | |
| Manufacturer: | Lo Tech Manufacturing Inc. | | |
| Serial Number: | 1006.1498 | CRN: | OH2299.2134 |
| Shell MAWP: | 150 | PSI | Shell Design Temp: 100 °F |
| Tube MAWP: | - | PSI | Tube Design Temp: - °F |
| Shell Material: | NS | | Head Material: NS |
| Shell Thickness: | NS | mm | Head Thickness: NS mm |
| Corrosion Allowance: | NS | mm | Date Built: 2004 |
| Size: | NS | in | Pipe / Rolled Plate: Pipe |
| RT: | - | | Client DWG #: - |

Photos



View of Nameplate

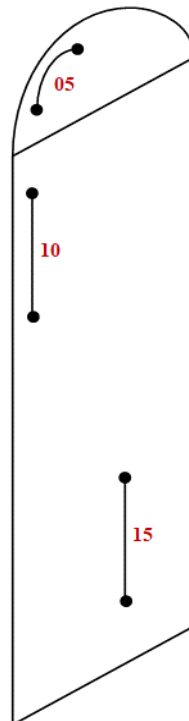


Overall view of Equipment



| | | | |
|-------------------------------|----------------------------|--------------------------|----------------------------------|
| Location Name: | Grande Prairie AB | LSD: | Portable |
| Jur #: | OH2299.2134 | Equipment/Tag No. | SS-742 |
| Equipment Description: | Fuel Gas Scrubber | | |
| Manufacturer: | Lo Tech Manufacturing Inc. | | |
| Serial Number: | 1006.1498 | CRN: | OH2299.2134 |
| Shell MAWP: | 150 | PSI | Shell Design Temp: 100 °F |
| Tube MAWP: | - | PSI | Tube Design Temp: - °F |
| Shell Material: | NS | | Head Material: NS |
| Shell Thickness: | NS | mm | Head Thickness: NS mm |
| Corrosion Allowance: | NS | mm | Date Built: 2004 |
| Size: | NS | in | Pipe / Rolled Plate: Pipe |
| RT: | - | | Client DWG #: - |

ISO Drawing of TML's



| | | | | | |
|------------------------|----------------------------|-----|--------------------|-------------|----|
| Location Name: | Grande Prairie AB | | LSD: | Portable | |
| Jur #: | OH2299.2134 | | Equipment/Tag No. | SS-742 | |
| Equipment Description: | Fuel Gas Scrubber | | | | |
| Manufacturer: | Lo Tech Manufacturing Inc. | | | | |
| Serial Number: | 1006.1498 | | CRN: | OH2299.2134 | |
| Shell MAWP: | 150 | PSI | Shell Design Temp: | 100 | °F |
| Tube MAWP: | - | PSI | Tube Design Temp: | - | °F |
| Shell Material: | NS | | Head Material: | NS | |
| Shell Thickness: | NS | mm | Head Thickness: | NS | mm |
| Corrosion Allowance: | NS | | Date Built: | 2004 | |
| Size: | NS | | Pipe/Rolled Plate: | Pipe | |
| RT: | - | | Client DWG #: | - | |

| TML# | Description | Shape | Size | Sch | Nom | Flag | 2022-05-16 | | | |
|------|-------------|-------------|------|-----|-----|------|------------|--|------|------|
| | | | | | | | Min | | Avg | |
| 5 | Head | Ellipsoidal | N/S | N/S | N/S | N/S | | | 7.04 | 7.57 |
| 10 | Shell | Cylindrical | N/S | N/S | N/S | N/S | | | 7.30 | 7.53 |
| 15 | Shell | Cylindrical | N/S | N/S | N/S | N/S | | | 7.80 | 8.20 |