

01-18-017-18W4M  
2ND STG DISCHARGE BOTTLE  
A0421913  
REPORT # A#0421913\_GRADY INSPECTION LTD VE UT INSP\_30MAR2022

DATE 3/30/2022  
CLIENT CNRL

Phone:403-793-7697  
8 Sarah King Crt E Brooks, Alberta, T1R 0J8  
grady.rustebakke@gmail.com




RESULTS OF INSPECTION:


VE Inspection:  
Fit For Service. Vessel is in good visual condition.  
PSV due for service  
UT Inspection:  
No corrosion was found with the ultrasonic inspection.


| PRESSURE EQUIPMENT |  |                        |  |    |  |          |  |           |  | AB-506 INTERVAL                 |  |                               |  |     |       |                    |     |     |  |    |  |     |  |
|--------------------|--|------------------------|--|----|--|----------|--|-----------|--|---------------------------------|--|-------------------------------|--|-----|-------|--------------------|-----|-----|--|----|--|-----|--|
| DISTRICT           |  | AB - OIL & NATURAL GAS |  |    |  | SHELL    |  | TUBE      |  | Compressor Bottles in vibrating |  |                               |  |     |       |                    |     |     |  |    |  |     |  |
| FACILITY           |  | Armada Gas Plant       |  |    |  | MAWT     |  | 300       |  | F                               |  | GRADE                         |  |     | YEARS |                    | REG |     |  |    |  |     |  |
| A#                 |  | A0421913               |  | YR |  | 1997     |  | MAWP      |  | 1000                            |  |                               |  | psi |       | Equip              |     | PSV |  | UT |  | REG |  |
| SERIAL #           |  |                        |  |    |  | PSV      |  | 870       |  |                                 |  | psi                           |  | 3   |       | 6                  |     | 6   |  | 6  |  | X   |  |
| CRN                |  | N6379.2                |  |    |  | PSV CRN  |  | 0G0449.2  |  |                                 |  |                               |  |     |       |                    |     |     |  |    |  |     |  |
| EQUIP#             |  |                        |  |    |  | SERVICED |  | 3/21/2016 |  |                                 |  |                               |  |     |       |                    |     |     |  |    |  |     |  |
| STATUS             |  | IN SERVICE             |  |    |  | UNIT     |  | K301      |  |                                 |  | VE                            |  | VI  |       | MT                 |     | PT  |  | ET |  | UT  |  |
|                    |  |                        |  |    |  |          |  |           |  |                                 |  | X                             |  |     |       |                    |     |     |  |    |  | X   |  |
| MANUFACTURER       |  | BIMAC INDUSTRIES LTD.  |  |    |  |          |  |           |  |                                 |  | INSPECTION TYPE               |  |     |       |                    |     |     |  |    |  |     |  |
| DH LSD             |  |                        |  |    |  | L        |  | 3         |  | Ft OD                           |  | .9                            |  | Ft  |       | INSPECTION RESULT: |     |     |  |    |  |     |  |
| REPAD              |  | UNIQUE ID              |  |    |  |          |  |           |  |                                 |  | NCR-OPERATIONS                |  |     |       |                    |     |     |  |    |  |     |  |
|                    |  |                        |  |    |  |          |  |           |  |                                 |  | NCR-REGULATORY/ADMIN          |  |     |       |                    |     |     |  |    |  |     |  |
|                    |  |                        |  |    |  |          |  |           |  |                                 |  | ACTION ITEM RAISED            |  |     |       |                    |     |     |  |    |  |     |  |
|                    |  |                        |  |    |  |          |  |           |  |                                 |  | REPAIR REQUIRED               |  |     |       |                    |     |     |  |    |  |     |  |
|                    |  |                        |  |    |  |          |  |           |  |                                 |  | SUITABLE FOR SERVICE          |  |     |       |                    | X   |     |  |    |  |     |  |
|                    |  |                        |  |    |  |          |  |           |  |                                 |  | RECOMMENDATIONS:              |  |     |       |                    |     |     |  |    |  |     |  |
|                    |  |                        |  |    |  |          |  |           |  |                                 |  | VE Inspection:<br>Service PSV |  |     |       |                    |     |     |  |    |  |     |  |

| SIGN OFF     |                   | API 510 | EXP.       | IPV   | EXP.      | INSPECTOR - PRIMARY | INSPECTOR - REVIEW | CLIENT SIGN OFF |
|--------------|-------------------|---------|------------|-------|-----------|---------------------|--------------------|-----------------|
| INSPECTED BY | ToddM Mckenzie    | 97445   | 12/31/2022 | 00133 | 7/13/2026 |                     |                    |                 |
| REVIEWED BY  | Ashley Rustebakke | 60285   | 7/31/2024  | 966   | 6/16/2026 |                     |                    |                 |

|   |                 |                 |                   |  |   |
|---|-----------------|-----------------|-------------------|--|---|
| <b>Ultrasonic Report</b>  |                 | <b>Date</b>     | 3/30/2022         | Phone: 403-793-7697<br>8 Sarah King Crt E Brooks, Alberta, T1R 0J8<br>grady.rustebakke@gmail.com |  |
| <b>LSD</b>  | 01-18-017-18W4M | <b>Facility</b> | Armada Gas Plant  |  |   |
| <b>DH-LSD</b>   |                 | <b>Field</b>    | Red Deer District |  |   |
| <b>Jurisdiction #</b> A0421913  |                 |                 |                   |  |   |
| <b>Serial #</b>   |                 |                 |                   |  |   |
| <b>Ultrasonic Report #:</b> A#0421913_GRADY INSPECTION LTD VE UT INSP_30MAR2022 |                 |                 |                   |  |   |

| ULTRASONIC SET    |                 |   | COMPONENT DETAILS |              |        |       | CODE      |             |                 |                 |           |           |
|-------------------|-----------------|---|-------------------|--------------|--------|-------|-----------|-------------|-----------------|-----------------|-----------|-----------|
| EQUIPMENT         | CALIBRATION DUE | SERIAL NUMBER   | MATERIAL GRADE    | SURFACE PREP |        | TEMP  | THICKNESS | CALIBRATION | EVALUATION      |                 |           |           |
| EPOCH 600         | 2/25/2023       | 120388107   | Carbon Steel      | Painted      |        | 0C    |           | ASME V      | ASME VIII Div 1 |                 |           |           |
| CALIBRATION BLOCK |                 | PROBE   |                   |              |        |       |           |             | COUPLING        |                 | METHOD    |           |
| TYPE              | SERIAL#         | REF dB  | SCAN dB           | FREQ.        | SIZE.  | ANGLE | SERIAL #  | TYPE        | COUPLANT        | CABLE           | TECHNIQUE | PROCEDURE |
| 10 Step Metric    | 14-2065         | 60  | 66                | 5 Mhz        | 0.25 " | 0     | 15B00DU3  | Dual        | UT-X            | 6' BNC to Micro | LW Dual   | UT01T1R4  |
|                   |                 |   |                   |              |        |       |           |             |                 |                 |           |           |
|                   |                 |   |                   |              |        |       |           |             |                 |                 |           |           |
|                   |                 |   |                   |              |        |       |           |             |                 |                 |           |           |
| SCOPE             |                 | As requested by Dustin Rumohr an ultrasonic inspection was completed on the COMPRESSOR BOTTLE |                   |              |        |       |           |             |                 |                 |           |           |
|                   |                 |   |                   |              |        |       |           |             |                 |                 |           |           |
| LIMITATIONS       |                 | Previous ultrasonic inspection data not obtained by Grady Inspection Ltd.                     |                   |              |        |       |           |             |                 |                 |           |           |
| RESULTS           |                 | No corrosion was found with the ultrasonic inspection.  |                   |              |        |       |           |             |                 |                 |           |           |

|                        |                           |                        |               |                         |   |  |  |
|------------------------|---------------------------|------------------------|---------------|-------------------------|---|--|--|
| <b>Technician Name</b> | <b>Certification Body</b> | <b>Certification #</b> | <b>Expiry</b> | Technician Signature    |  |  |  |
| 3    ToddM             | CGSB                      | 9234                   |               |                         |   |  |  |
|                        |                           |                        |               | <b>Client Name</b>      |   |  |  |
|                        |                           |                        |               | <b>Client Signature</b> |   |  |  |

|   |                 |   |                   |  |   |  |  |  |
|---|-----------------|---|-------------------|--|---|--|--|--|
| <b>External Inspection - (Vessel)</b>   |                 | <b>Date</b>   | 3/30/2022         |  | Phone:403-793-7697  |  |  |  |
| <b>LSD</b>                              | 01-18-017-18W4M | <b>Facility</b>   | Armada Gas Plant  |  | 8 Sarah King Crt E Brooks, Alberta, T1R 0J8<br>grady.rustebakke@gmail.com |  |  |  |
| <b>DH-LSD</b>                           |                 | <b>Field</b>  | Red Deer District |  |   |  |  |  |
| <b>Jurisdiction #</b> A0421913          |                 |   |                   |  |   |  |  |  |
| <b>Fit For Service:</b>                 |                 | Fit For Service.  |                   |  |   |  |  |  |
| <b>Inspection Summary:</b>              |                 | Vessel is in good visual condition.<br>PSV due for service  |                   |  |   |  |  |  |
| <b>Recommendations:</b>                 |                 | Service PSV   |                   |  |   |  |  |  |
| <b>External Inspection Items</b>        | <b>G/F/P</b>    | <b>Comments</b>   |                   |  |   |  |  |  |
| <b>General Condition:</b>               | Good            | No notable mechanical damage, areas of wear/fretting, distortion, misalignment, or visible weld defects.  |                   |  |   |  |  |  |
| <b>External Coating:</b>                | Good            | Vessel is in good visual condition.<br>Vessel is indoors.   |                   |  |   |  |  |  |
| <b>Insulation / Cladding:</b>           | N/A             | Non insulated vessel  |                   |  |   |  |  |  |
| <b>Nozzles, Piping and Connections:</b> | Good            | Number of nozzles repaded:<br>Number of nozzles without repad:<br>Nozzles and piping in good visual condition   |                   |  |   |  |  |  |
| <b>Buried Vessels:</b>                  | N/A             | Above Ground  |                   |  |   |  |  |  |
| <b>Ladders, Platforms and Walkways:</b> | N/A             | No attached ladder or platform  |                   |  |   |  |  |  |
| <b>Foundations and Supports:</b>        | Good            | Building is secure<br>Building on concrete foundation   |                   |  |   |  |  |  |
| <b>Shell:.</b>                          | Good            | No notable mechanical damage, areas of wear/fretting, distortion, misalignment or visible weld defects.   |                   |  |   |  |  |  |
| <b>Saddles / Skirts:</b>                | Good            | Vessel is mounted to compressor module by flange bolting.   |                   |  |   |  |  |  |
| <b>Grounding:</b>                       | Good            | Ground Wire is secure<br>Grounded through piping system   |                   |  |   |  |  |  |
| <b>Gauges and Instrumentation:</b>      | Good            | <div>Shell Gauge ( - @ )Temp Gauge ( - @ )</div><br>Compressor is digitally monitored for pressure and temperature.   |                   |  |   |  |  |  |
| <b>Pressure Protection:</b>             | Fair            | The PSV Set Pressure ( 870 psi) is suitable for the MAWP ( 1000 psi)<br>PSV Due for Service, not yet exceeding six months or 10% of Interval AB 506 2014 11.4.1 Interval Deferral Notwithstanding the above, an inspection or PRV servicing interval may be deferred by the Inspector, without other approvals, based on a satisfactory review of the equipment history, when the period of time for which the item is to be deferred does not exceed 10 % of the inspection/servicing interval or six months, whichever is less. |                   |  |   |  |  |  |
| <b>NDE Summary:</b>                     | Good            | No corrosion was found with the ultrasonic inspection.  |                   |  |   |  |  |  |
| <b>Manway Davits/Quick Closure:</b>     | N/A             | No Manway   |                   |  |   |  |  |  |
| <b>Nameplate:</b>                       | Good            | Nameplate is legible and readily accessible and securely affixed  |                   |  |   |  |  |  |
| <b>Code Variance:</b>                   |                 |   |                   |  |   |  |  |  |

## PSV Data

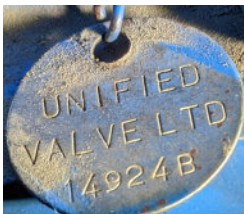
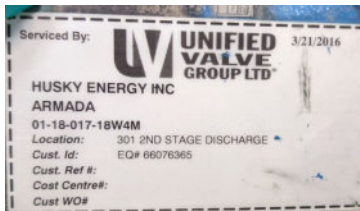
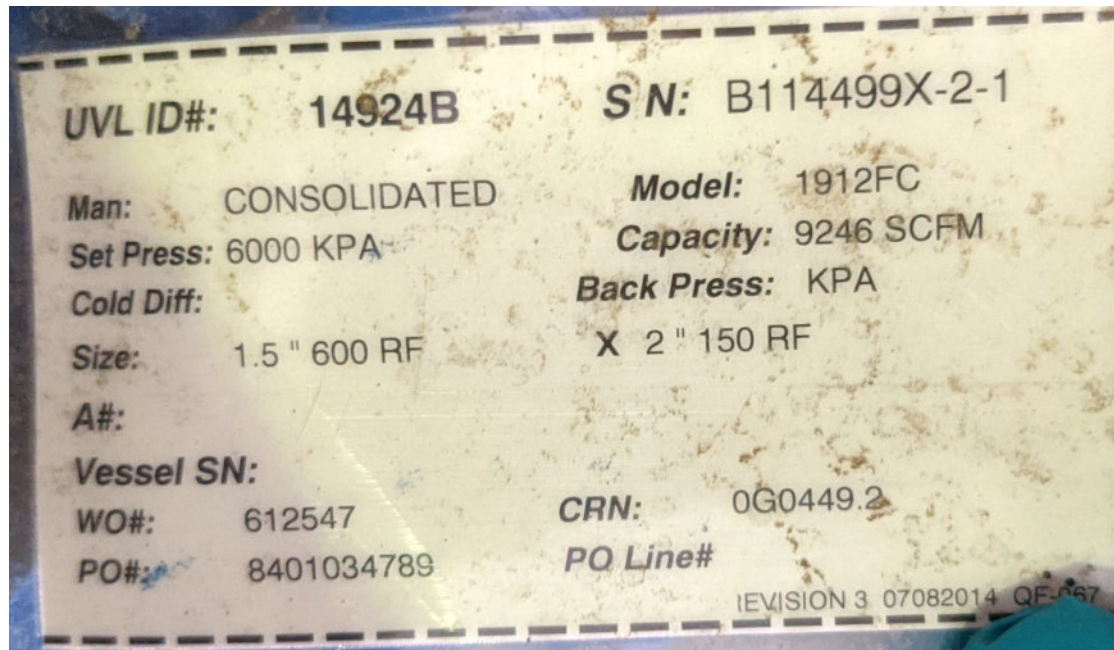
LSD

01-18-017-18W4M

FACILITY Armada Gas Plant

FIELD Red Deer District

Phone:403-793-7697

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INSPECTION LTD

## ASSOCIATED PRESSURE EQUIPMENT DATA

PV JUR/SER A0421913

SHELL

TUBE

MAWP

1000

psi

## PSV FIT FOR SERVICE STATEMENT

Fit For Service.

## PSV STATIC DATA

MODEL 1912FC

SERIAL B114499X-2-1

MANUFACTURER CONSOLIDATED

TAG 14924B

CRN 0G0449.2

SEAL Y

SET PRES

870

psi

CAPACITY 9246

SCFM

SERVICE DATE

3/21/2016

SERVICE COMPANY

Unified Valve Group

T/F

UV

NB

F

UV

NB

SIZE

B VALVE

CARSEAL

INLET

1.5

N

OUTLET

2

N

## PSV COMMENTS

PSV due for service



Overview Photo

LSD 01-18-017-18W4M  
Jur # A0421913  
Serial #

Date

3/30/2022

FACILITY

Armada Gas Plant

FIELD

Red Deer District

Phone:403-793-7697

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**GRADY**  
INSPECTION LTD



Nameplate



Overview



Temperature Gauge

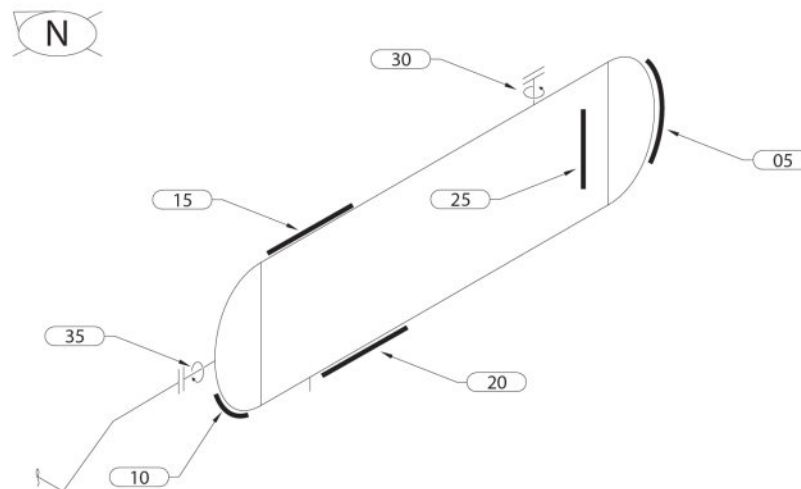
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**GRADY**  
INSPECTION LTD

**Ser #**

| Ser # |      | Inspection Dates and Thickness Values (mm) |       |       |       |        |      |      |           |      |     |          |          |          |      | %         |                | Corrosion Rates |     |     | Rem Life      |                | Rem Life       |                | Next                |  | Insp |  |
|-------|------|--|-------|-------|-------|--------|------|------|-----------|------|-----|----------|----------|----------|------|-----------|----------------|-----------------|-----|-----|---------------|----------------|----------------|----------------|---------------------|--|------|--|
| CML#  | Norm | CA/Tol                                     | SFlag | STmin | PTmin | > Tmin | Comp | Type | Pipe Size | Code | MOP | Baseline | 3rd Last | 2nd Last | Last | # of Insp | Norm Wall Loss | ST              | LTn | LTi | Rem Life Date | Rem Life (yrs) | Next Insp Date | Insp Int (yrs) | Inspection Comments |  |      |  |



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LSD 01-18-017-18W4M FACILITY Armada Gas Plant  
DH-LSD FIELD Red Deer District  
Jur # A0421913 DWG 1 Location:  
Ser #

Phone:403-793-7697

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grady.rustebakke@gmail.com



| Ser # | Inspection Dates and Thickness Values (mm) |      |        |       |       |       |        |                     |              |      |          |          |      |  |          |  |          |      |      |         |      |           |    |      |      |      |  |  | %<br>Norm<br>Wall<br>Loss | Corrosion Rates |     |  | Rem<br>Life<br>Date | Rem<br>Life<br>(yrs) | Next<br>Insp Date | Insp<br>Int (yrs) | Inspection<br>Comments |
|-------|--|------|--------|-------|-------|-------|--------|---------------------|--------------|------|----------|----------|------|--|----------|--|----------|------|------|---------|------|-----------|----|------|------|------|--|--|---------------------------|-----------------|-----|--|---------------------|----------------------|-------------------|-------------------|------------------------|
|       | CML#                                       | Nom  | CA/Tol | SFlag | STmin | PTmin | > Tmin | Comp Type           | Pipe Size    | Code | MOP      | Baseline |      |  | 3rd Last |  | 2nd Last |      | Last |         |      | # of Insp | ST | LTn  | LTi  |      |  |  |                           |                 |     |  |                     |                      |                   |                   |                        |
| 05    | 10.5                                       | 10.5 |        |       |       |       | Head   |                     | UG32HeadElli | 1000 | 4/4/07   | 11.7     | 12.1 |  |          |  | 11/28/17 | 12.3 |      | 3/30/22 | 11.5 | 12.9      | 4  | -9%  | 0.18 | 0.01 |  |  |                           | 3/28/2028       | 6.0 |  |                     |                      |                   |                   |                        |
| 10    | 10.5                                       | 10.5 |        |       |       |       | Head   |                     | UG32HeadElli | 1000 | 9/23/15  | 12.5     | 10.5 |  |          |  | 11/28/17 | 12.6 |      | 3/30/22 | 12.2 | 12.7      | 3  | -16% | 0.09 | 0.05 |  |  |                           | 3/28/2028       | 6.0 |  |                     |                      |                   |                   |                        |
| 15    | 12.7                                       | 12.6 |        |       |       |       | Shell  |                     | UG27ShellInt | 1000 | 4/4/07   | 14.4     | 14.5 |  |          |  | 9/23/15  | 13.8 |      | 3/30/22 | 13.2 | 13.5      | 3  | -4%  | 0.09 | 0.08 |  |  |                           | 3/28/2028       | 6.0 |  |                     |                      |                   |                   |                        |
| 20    | 12.7                                       | 12.6 |        |       |       |       | Shell  |                     | UG27ShellInt | 1000 | 9/23/15  | 14.0     | 14.2 |  |          |  | 11/28/17 | 13.2 |      | 3/30/22 | 12.7 | 13.2      | 3  | 0%   | 0.12 | 0.20 |  |  |                           | 3/28/2028       | 6.0 |  |                     |                      |                   |                   |                        |
| 25    | 12.7                                       | 12.6 |        |       |       |       | Shell  |                     | UG27ShellInt | 1000 | 3/30/22  | 13.0     | 13.5 |  |          |  |          |      |      |         |      |           | 1  | -2%  |      |      |  |  |                           | 3/28/2028       | 6.0 |  |                     |                      |                   |                   |                        |
| 30    | 21.9                                       |      |        |       |       |       | Nozzle | 6" XXS ----(21.9mm) | UG45Nozzle   | 1000 | 11/28/17 | 21.9     | 22.2 |  |          |  |          |      |      | 3/30/22 | 21.5 | 22.5      | 2  | 2%   | 0.09 |      |  |  |                           | 3/28/2028       | 6.0 |  |                     |                      |                   |                   |                        |
| 35    | 17.1                                       |      |        |       |       |       | Nozzle | 4" XXS ----(17.1mm) | UG45Nozzle   | 1000 | 9/23/15  | 18.1     | 18.5 |  |          |  | 11/28/17 | 17.7 |      | 3/30/22 | 17.4 | 18.0      | 3  | -2%  | 0.07 | 0.11 |  |  |                           | 3/28/2028       | 6.0 |  |                     |                      |                   |                   |                        |