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**Ultrasonic
 Inspection Report**

**UT_A 0595729_A 0595773_SN 10-062-
 FGS_jan2026**

Client: Fuelled	Facility: West Gunderson Field	Date: Jan 20, 2026
LSD: 13-09-64-13 w6m	Item(s) Inspected: Various Vessels & Piping	Job #: 14606
Material: Carbon Steel / Stainless Steel	Thickness Range: 0 to 75mm	WO #: n/a
Procedure: UT-01 Rev. 10	Ref. Code: ASME VIII & ASME B31.3	Surf. Temp: -20° to 20° C
UT Equipment: Asset# FD-15	Olympus Epoch XT	Serial Number: 070057201
Transducer 1:	Asset# T-295 Technisonic Research 0° Dual 5MHz Diam. 6.35mm	Serial # 40324
Transducer 2:	Asset# T-54 Olympus D-790-SM Hot Probe 0° 5MHz Diam. 6.35mm	Serial # 858220
Transducer 3:	Asset# T-255 Olympus P/E 0° 5MHz Diameter 12.7mm	Serial Number: 1412290
Cal. Block 1:	Asset# CB-80 (1018) Carbon Steel 6-step wedge	Serial Number: 62196
Cal. Block 2:	Asset# CB-75 Stainless Steel Step Wedge 2.5 -12.5mm	Serial Number: 52747
Couplant: Magnaflux UTX	Cable 1: 2m Dual BNC to Microdot	Cable 2: 2m Single BNC to Microdot

Job Scope: To perform a baseline ultrasonic thickness survey on the requested vessels and piping located at 13-09-64-13 w6m in the West Gunderson Field.

Results: See attached UTS drawing and data sheets for all point locations and recorded thickness measurements.

Client Representative: Will Van Weelden
Technician(s): Dave Ellis (CGSB UT-2, MT-2, PT-2 #21762) (SNT-TC-1A MT-II, UT-II, PT-II)
Assistant(s): Denon Bamber
Reviewed and Approved By: Lance Smith (CGSB MT-2, UT-2, PT-2, RT-1 #8052) (SNT-TC-1A MT-II, UT-II, PT-II)



This document is a short excerpt from the Lance Inspections NDT Procedures and Techniques Manual, revision 10, sections 2 and 3. A copy of the Lance Inspections NDT manual is available by request to sutz@lanceinspections.com.

Lance Inspections completes two typical types of a UTS: a baseline and a resurvey.

A **baseline** is when Lance Inspections has not completed a previous thickness survey on the pressure equipment requiring testing. The equipment is to be drawn isometrically; the static data is to be recorded; the UT scan locations (CMLs) are to be chosen, scanned, and the thickness readings are to be recorded.

A **resurvey** is when pressure equipment has had a previous UTS completed by Lance Inspections. All the equipment has already been drawn, the data has already been recorded, and the UT CML locations have already been chosen. For this inspection, UT is to be completed on the existing CMLs, and the thickness readings are to be recorded for comparison purposes.

Condition Monitoring Locations (CMLs)

CMLs are the locations where UT will be conducted. In-depth instruction on where CMLs should be placed is not possible because of the different vessel types, processes, damage mechanisms, and piping configurations.

Lance Inspections has a general guideline for selecting CML test points on pressure equipment, which can be found in the Lance Inspections NDT Procedure and Techniques Manual (Rev. 10, Section 3). Additional CML placement is based on the Technician's experience, knowledge of the process, initial findings, or client request. All CML locations are identified on a drawing that is in the UTS report.

Lance Inspections identifies each CML on the pressure vessel or piping with a numbered metal tag and marks the scan area with a paint marker. This is for the client's knowledge and to assist Lance Inspections technicians with UTS resurveys. It is essential to accurately locate and scan the same CML areas as in previous inspections for trendability.

At Lance Inspections, the horizontal and vertical CMLs for UTS scanning are typically 3 inches wide x 16 inches long. These bands are primarily used for vertical and horizontal pressure vessel shells and heads. Circular CMLs on piping are typically 3 inches wide x 360°. The average scan location on a fitting is a 3" wide band at critical areas as accessible, such as the outside radius of elbows, neck of tees, the back of tees, or any other areas of concern.

Low-Thickness Readings Identification

Thickness readings that are less than a predetermined thickness (referred to as a flag thickness) are marked in **blue** on the CML identification drawings in the UTS report. Lance Inspections does not deem CMLs acceptable or rejectable. Flagged CMLs in the report are for client review purposes.

Lance inspections determines the flag thicknesses for each CML by the following methods:

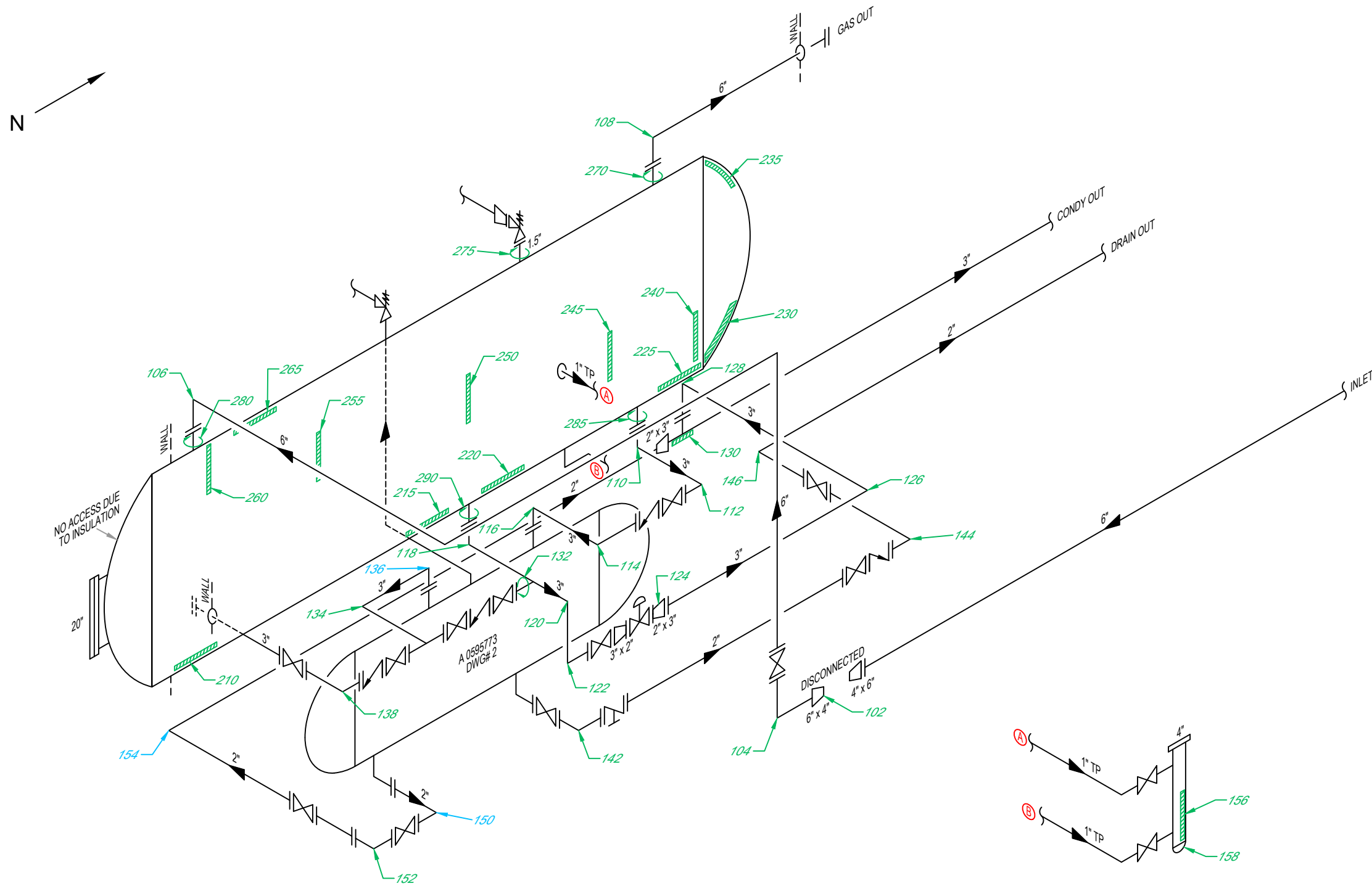
A pressure vessel's flag thickness is determined by subtracting the given designed corrosion allowance from the nominal thickness. If there is no stated corrosion allowance available, then Lance Inspections uses a Thickness Reduction Flag (TRF) value for vessel and nozzle CMLs. This value is 1.5mm (0.059") less than the known nominal thickness. Without a known nominal, the flag thickness for vessel and nozzle CMLs will be 1.5mm (0.059") from the initial minimum thickness reading.

A flag thickness for piping is determined by subtracting 12.5% (mill tolerance) from the pipe nominal thickness. The 12.5% is considered the corrosion allowance on the UTS report. Piping and fitting points without a known nominal thickness will have a 1.5mm corrosion allowance taken from the initial minimum thickness reading for the flag.

Sincerely,

Lance Smith,
Owner/General Manager
Lance Inspections Inc.

Steve Utz
NDT Level 3/Quality Control Manager
Lance Inspections Inc.



PSV DATA

Manufacturer: FARRIS	Serviced By: UNIFIED VALVE
Model: 26GA13-120	Service Date: 2-AUG-19
Serial: 549186-3-A10	Code Stamp: UV
Set Pressure: 9928 kPa	CRN: OG8442.5C
Capacity: 14055 scfm	Location: TOP SHELL
Tag: N/S	Inlet Size: 1.5" 600 lb
Flows To: N/S	Outlet Size: 2.5" 150 lb



Customer: FUELLED	Description: HORIZONTAL SEPARATOR
Facility: WEST GUNDERSON FIELD	Location: 13-09-64-13 W6M (CNRL)
Reg A#: 0595729	Serial #: 10-062-HS
Manufacturer: TARPON	Unit #: V-100
CRN #: L8645.21	Drawing#: 1
Year Built: 2010	
Shell MAWP: 9928 kPa	Shell MAWT: 38°C
Shell Material: SA 516 70N	Nominal: 44.5mm
CA: 1.6mm	
Tube "A" MAWP: _____	Tube "A" MAWT: _____
Head Material: SA 516 70N	Nominal: 42.9mm
CA: 1.6mm	
Tube "B" MAWP: _____	Tube "B" MAWT: _____
Tube Material: _____	Nominal: _____
CA: _____	
Size: 48in x 20ft	Manway: 20in
MDMT: -29°C	Boot Shell Mat: _____
Nominal: _____	CA: _____
Insulated: PARTIAL	C Stamp: U
RT: 1	PWHT: YES
Boot Head Mat: _____	Nominal: _____
CA: _____	

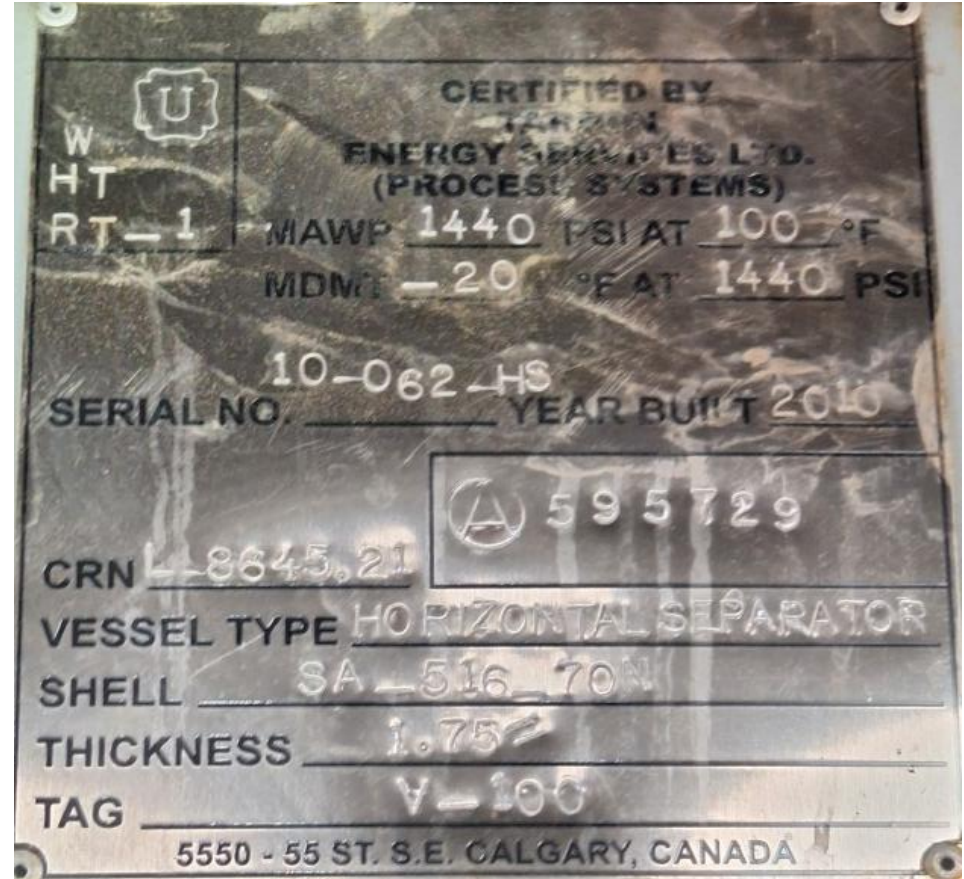


Client: **Fuelled**
Unit #: **n/s**
Equip Description: **Horizontal Separator**
Reg A#: **0595729**
Drawing #: **1**

Vessel Overview



Data Plate





UTS Data Sheet

Client: **Fuelled**
 Unit #: **n/s**
 Equip Description: **Horizontal Separator**
 Reg A#: **0595729**
 Drawing #: **1**

	Nominal Thickness (mm)	Corrosion Allowance (mm)	Flag Thickness (mm)
102 Description: 6" to 4" Reducer Date: Jan. 20, 26 Minimum: 9.6 Average: 10.6 Comments: <i>Jan 2026_Min scan at 4" side.</i>	8.6	1.1	7.5
104 Description: 6" 90° Elbow Date: Jan. 20, 26 Minimum: 10.4 Average: 10.8 Comments: <i>Jan 2026_Limited access due to pipe support.</i>	11.0	1.4	9.6
106 Description: 6" 90° Elbow Date: Jan. 20, 26 Minimum: 12.0 Average: 12.6 Comments:	11.0	1.4	9.6
108 Description: 6" 90° Elbow Date: Jan. 20, 26 Minimum: 10.3 Average: 10.7 Comments:	11.0	1.4	9.6
110 Description: 3" 90° Elbow Date: Jan. 20, 26 Minimum: 7.5 Average: 8.0 Comments:	7.6	1.0	6.6
112 Description: 3" 90° Elbow Date: Jan. 20, 26 Minimum: 7.6 Average: 8.0 Comments:	7.6	1.0	6.6
114 Description: 3" 90° Elbow Date: Jan. 20, 26 Minimum: 7.3 Average: 7.7 Comments:	7.6	1.0	6.6
116 Description: 3" 90° Elbow Date: Jan. 20, 26 Minimum: 7.1 Average: 7.6 Comments:	7.6	1.0	6.6



UTS Data Sheet

Client: **Fuelled**
 Unit #: **n/s**
 Equip Description: **Horizontal Separator**
 Reg A#: **0595729**
 Drawing #: **1**

	Nominal Thickness (mm)	Corrosion Allowance (mm)	Flag Thickness (mm)
118 Description: 3" 90° Elbow Date: Jan. 20, 26 Minimum: 7.6 Average: 8.0 Comments:	7.6	1.0	6.6
120 Description: 3" 90° Elbow Date: Jan. 20, 26 Minimum: 7.4 Average: 7.8 Comments:	7.6	1.0	6.6
122 Description: 3" 90° Elbow Date: Jan. 20, 26 Minimum: 7.4 Average: 7.8 Comments:	7.6	1.0	6.6
124 Description: 3" to 2" Reducer Date: Jan. 20, 26 Minimum: 6.4 Average: 7.8 Comments: <i>Jan 2026_Min scan at 2" side.</i>	5.5	0.7	4.8
126 Description: 3" 90° Elbow Date: Jan. 20, 26 Minimum: 7.9 Average: 8.4 Comments:	7.6	1.0	6.6
128 Description: 3" 90° Elbow Date: Jan. 20, 26 Minimum: 8.0 Average: 8.5 Comments:	7.6	1.0	6.6
130 Description: Back of 3" x 3" Tee Date: Jan. 20, 26 Minimum: 9.2 Average: 9.9 Comments:	7.6	1.0	6.6
132 Description: Neck of 3" x 3" Tee Date: Jan. 20, 26 Minimum: 7.1 Average: 7.7 Comments: <i>Jan 2026_Min scan at 6:00 position.</i>	7.6	1.0	6.6



UTS Data Sheet

Client: **Fuelled**
 Unit #: **n/s**
 Equip Description: **Horizontal Separator**
 Reg A#: **0595729**
 Drawing #: **1**

	Nominal Thickness (mm)	Corrosion Allowance (mm)	Flag Thickness (mm)
134 Description: 3" 90° Elbow Date: Jan. 20, 26 Minimum: 7.0 Average: 7.6 Comments:	7.6	1.0	6.6
136 Description: 3" 90° Elbow Date: Jan. 20, 26 Minimum: 6.2 Average: 6.8 Comments:	7.6	1.0	6.6
138 Description: 3" 90° Elbow Date: Jan. 20, 26 Minimum: 7.0 Average: 7.6 Comments:	7.6	1.0	6.6
142 Description: 2" 90° Elbow Date: Jan. 20, 26 Minimum: 5.2 Average: 5.5 Comments:	5.5	0.7	4.8
144 Description: 2" 90° Elbow Date: Jan. 20, 26 Minimum: 5.5 Average: 5.8 Comments:	5.5	0.7	4.8
146 Description: 2" 90° Elbow Date: Jan. 20, 26 Minimum: 8.1 Average: 8.9 Comments:	8.7	1.1	7.6
150 Description: 2" 90° Elbow Date: Jan. 20, 26 Minimum: 4.8 Average: 5.3 Comments:	5.5	0.7	4.8
152 Description: 2" 90° Elbow Date: Jan. 20, 26 Minimum: 5.4 Average: 5.7 Comments:	5.5	0.7	4.8



UTS Data Sheet

Client: **Fuelled**
 Unit #: **n/s**
 Equip Description: **Horizontal Separator**
 Reg A#: **0595729**
 Drawing #: **1**

	Nominal Thickness (mm)	Corrosion Allowance (mm)	Flag Thickness (mm)
154 Description: 2" 90° Elbow Date: Jan. 20, 26 Minimum: 4.7 Average: 5.1 Comments:	5.5	0.7	4.8
156 Description: Vertical Band on 4" Column Date: Jan. 20, 26 Minimum: 7.9 Average: 8.3 Comments:			6.4
158 Description: End Cap on 4" Column Date: Jan. 20, 26 Minimum: 7.4 Average: 8.0 Comments:			5.9
210 Description: Bottom Shell Date: Jan. 20, 26 Minimum: 45.2 Average: 45.4 Comments:	44.5	1.6	42.9
215 Description: Bottom Shell Date: Jan. 20, 26 Minimum: 44.8 Average: 45.1 Comments:	44.5	1.6	42.9
220 Description: Bottom Shell Date: Jan. 20, 26 Minimum: 45.3 Average: 45.4 Comments:	44.5	1.6	42.9
225 Description: Bottom Shell Date: Jan. 20, 26 Minimum: 45.0 Average: 45.4 Comments:	44.5	1.6	42.9
230 Description: Lower North Head Date: Jan. 20, 26 Minimum: 44.5 Average: 44.9 Comments:	42.9	1.6	41.3



UTS Data Sheet

Client: **Fuelled**
 Unit #: **n/s**
 Equip Description: **Horizontal Separator**
 Reg A#: **0595729**
 Drawing #: **1**

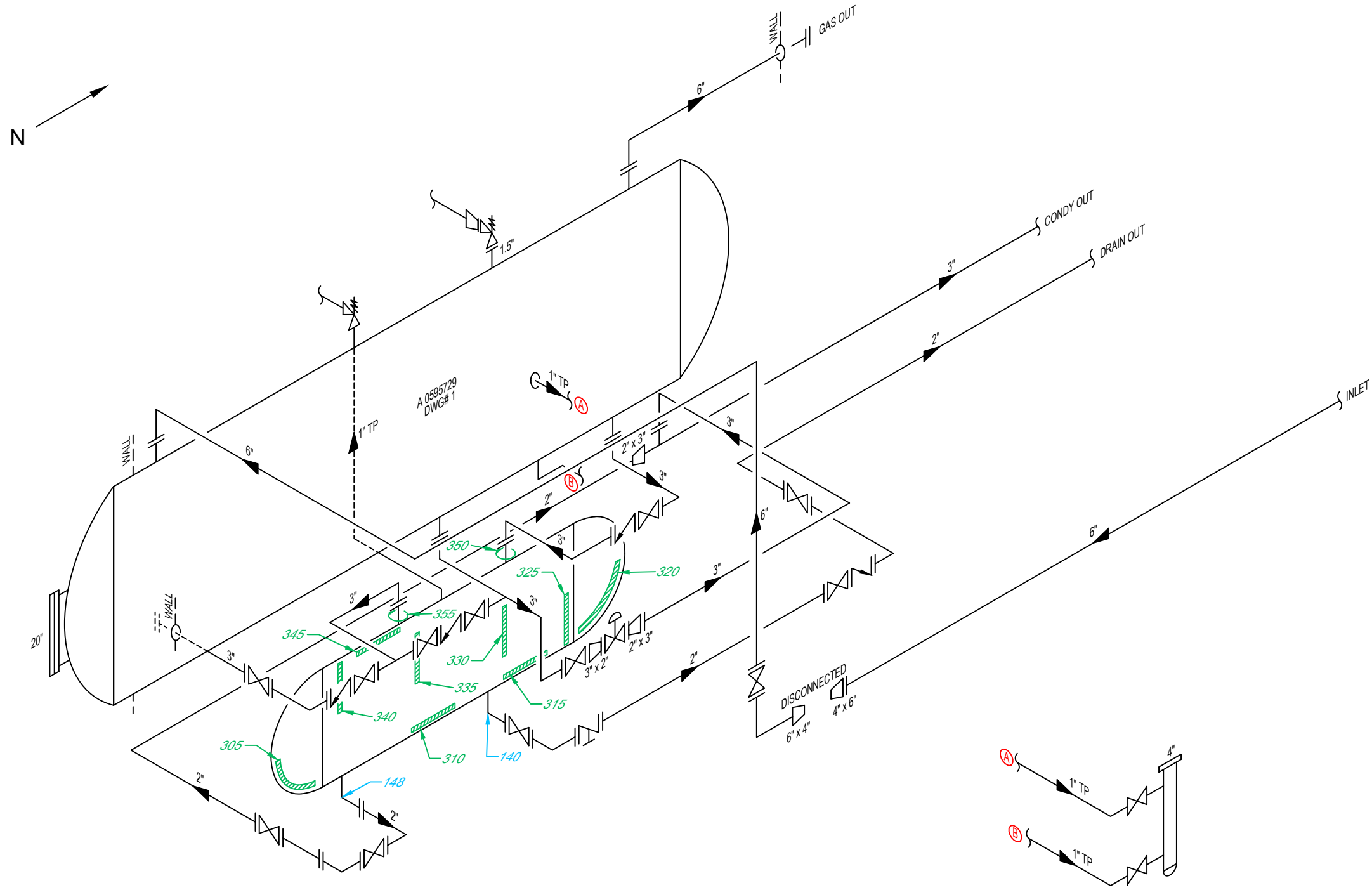
	Nominal Thickness (mm)	Corrosion Allowance (mm)	Flag Thickness (mm)
235 Description: Upper North Head Date: Jan. 20, 26 Minimum: 44.2 Average: 45.2 Comments:	42.9	1.6	41.3
240 Description: Lower Shell Date: Jan. 20, 26 Minimum: 44.9 Average: 45.3 Comments:	44.5	1.6	42.9
245 Description: Lower Shell Date: Jan. 20, 26 Minimum: 45.5 Average: 45.6 Comments:	44.5	1.6	42.9
250 Description: Mid Shell Date: Jan. 20, 26 Minimum: 45.3 Average: 45.5 Comments:	44.5	1.6	42.9
255 Description: Upper Shell Date: Jan. 20, 26 Minimum: 45.6 Average: 45.8 Comments:	44.5	1.6	42.9
260 Description: Upper Shell Date: Jan. 20, 26 Minimum: 45.4 Average: 45.6 Comments:	44.5	1.6	42.9
265 Description: Top Shell Date: Jan. 20, 26 Minimum: 45.7 Average: 45.8 Comments:	44.5	1.6	42.9
270 Description: Circ on 6" Nozzle Date: Jan. 20, 26 Minimum: 36.1 Average: 36.3 Comments: <i>Flange rating 600lb.</i>			34.6



UTS Data Sheet

Client: **Fuelled**
Unit #: **n/s**
Equip Description: **Horizontal Separator**
Reg A#: **0595729**
Drawing #: **1**

	Nominal Thickness (mm)	Corrosion Allowance (mm)	Flag Thickness (mm)
275 Description: Circ on 1.5" Nozzle Date: Jan. 20, 26 Minimum: 16.7 Average: 17.2 Comments: <i>Flange rating 600lb.</i>			15.2
280 Description: Circ on 6" Nozzle Date: Jan. 20, 26 Minimum: 36.2 Average: 36.5 Comments: <i>Flange rating 600lb.</i>			34.7
285 Description: Circ on 3" Nozzle Date: Jan. 20, 26 Minimum: 31.3 Average: 31.7 Comments: <i>Flange rating 600lb.</i>			29.8
290 Description: Circ on 3" Nozzle Date: Jan. 20, 26 Minimum: 30.9 Average: 31.3 Comments: <i>Flange rating 600lb.</i>			29.4



PSV DATA

Manufacturer: <u>FARRIS</u>	Serviced By: <u>UNIFIED VALVE</u>
Model: <u>27DA33H-M20</u>	Service Date: <u>2-AUG-19</u>
Serial: <u>559814-1-KE</u>	Code Stamp: <u>UV</u>
Set Pressure: <u>14651 kPa</u>	CRN: <u>OG11969.5C</u>
Capacity: <u>155 usgpm</u>	Location: <u>TOP SHELL</u>
Tag: <u>N/S</u>	Inlet Size: <u>1" MT</u>
Flows To: <u>N/S</u>	Outlet Size: <u>1" FT</u>



Customer: <u>FUELLED</u>	Description: <u>BLOWCASE</u>	
Facility: <u>WEST GUNDERSON FIELD</u>	Location: <u>13-09-64-13 W6M (CNRL)</u>	
Reg A#: <u>0595773</u>	Serial #: <u>10-062-HB</u> Drawing#: <u>2</u>	
CRN #: <u>V0856.2</u>	Manufacturer: <u>TARPON</u> Unit #: <u>V-200</u> Year Built: <u>2010</u>	
Shell MAWP: <u>14651 kPa</u>	Shell MAWT: <u>66°C</u>	Shell Material: <u>SA 516 70N</u> Nominal: <u>34.9mm</u> CA: <u>1.6mm</u>
Tube "A" MAWP: _____	Tube "A" MAWT: _____	Head Material: <u>SA 516 70N</u> Nominal: <u>34.9mm</u> CA: <u>1.6mm</u>
Tube "B" MAWP: _____	Tube "B" MAWT: _____	Tube Material: _____ Nominal: _____ CA: _____
Size: <u>24in x 8ft</u>	Manway: <u>NO</u> MDMT: <u>-29°C</u>	Boot Shell Mat: _____ Nominal: _____ CA: _____
Insulated: <u>NO</u>	C Stamp: <u>U</u> RT: <u>1</u> PWHT: <u>NO</u>	Boot Head Mat: _____ Nominal: _____ CA: _____

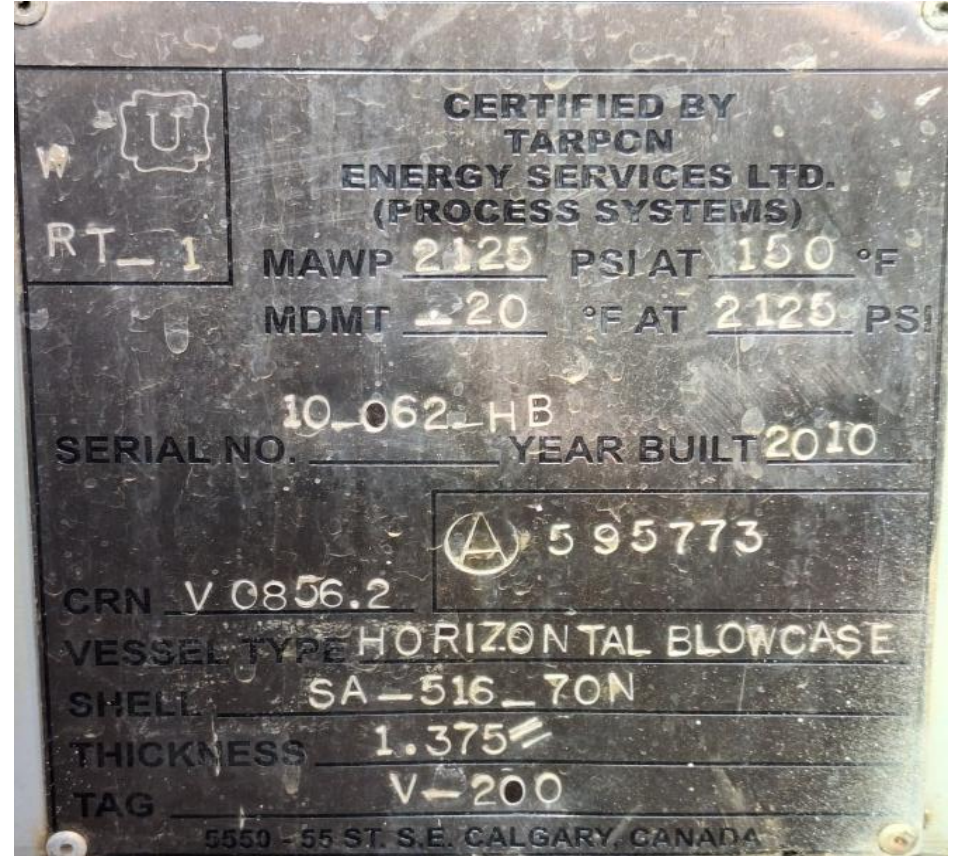


Client: **Fuelled**
Unit #: **n/s**
Equip Description: **Blowcase**
Reg A#: **0595773**
Drawing #: **2**

Vessel Overview



Data Plate





UTS Data Sheet

Client: **Fuelled**
 Unit #: **n/s**
 Equip Description: **Blowcase**
 Reg A#: **0595773**
 Drawing #: **2**

	Nominal Thickness (mm)	Corrosion Allowance (mm)	Flag Thickness (mm)
140 Description: 2" 90° Nozzle Date: Jan. 20, 26 Minimum: 9.3 Average: 10.3 Comments: <i>Flange rating 900lb. Jan 2026_Min scan at mid elbow.</i>	11.1	1.6	9.5
148 Description: 2" 90° Nozzle Date: Jan. 20, 26 Minimum: 9.4 Average: 10.7 Comments: <i>Flange rating 900lb. Jan 2026_Min scan at mid elbow.</i>	11.1	1.6	9.5
305 Description: Lower South Head Date: Jan. 20, 26 Minimum: 34.2 Average: 36.0 Comments:	34.9	1.6	33.3
310 Description: Bottom Shell Date: Jan. 20, 26 Minimum: 35.0 Average: 35.3 Comments:	34.9	1.6	33.3
315 Description: Bottom Shell Date: Jan. 20, 26 Minimum: 35.2 Average: 35.4 Comments:	34.9	1.6	33.3
320 Description: Lower North Head Date: Jan. 20, 26 Minimum: 33.6 Average: 35.4 Comments:	34.9	1.6	33.3
325 Description: Lower Shell Date: Jan. 20, 26 Minimum: 34.5 Average: 34.8 Comments:	34.9	1.6	33.3
330 Description: Lower Shell Date: Jan. 20, 26 Minimum: 35.2 Average: 35.3 Comments:	34.9	1.6	33.3



UTS Data Sheet

Client: **Fuelled**
 Unit #: **n/s**
 Equip Description: **Blowcase**
 Reg A#: **0595773**
 Drawing #: **2**

	Nominal Thickness (mm)	Corrosion Allowance (mm)	Flag Thickness (mm)
335 Description: Upper Shell Date: Jan. 20, 26 Minimum: 35.3 Average: 35.5 Comments:	34.9	1.6	33.3
340 Description: Upper Shell Date: Jan. 20, 26 Minimum: 34.9 Average: 35.2 Comments:	34.9	1.6	33.3
345 Description: Top Shell Date: Jan. 20, 26 Minimum: 34.9 Average: 35.2 Comments:	34.9	1.6	33.3
350 Description: Circ on 3" Nozzle Date: Jan. 20, 26 Minimum: 51.0 Average: 51.3 Comments: <i>Flange rating 900lb.</i>			49.5
355 Description: Circ on 3" Nozzle Date: Jan. 20, 26 Minimum: 51.0 Average: 51.4 Comments: <i>Flange rating 900lb.</i>			49.5



Customer: FUELLED Description: FUEL GAS SCRUBBER

Facility: WEST GUNDERSON FIELD Location: 13-09-64-13 W6M (CNRL)

Reg A#: N/A Serial #: 10-062-FGS Drawing#: 3

CRN #: L8912.213T Manufacturer: TARPON Unit #: V-101 Year Built: 2010

Shell MAWP: 1034 kPa Shell MAWT: 38°C Shell Material: SA 106 B Nominal: 8.2mm CA: N/S

Tube "A" MAWP: _____ Tube "A" MAWT: _____ Head Material: SA 106 B Nominal: 8.2mm CA: N/S

Tube "B" MAWP: _____ Tube "B" MAWT: _____ Tube Material: _____ Nominal: _____ CA: _____

Size: 10in x 30in Manway: NO MDMT: -29°C Boot Shell Mat: _____ Nominal: _____ CA: _____

Insulated: NO C Stamp: N/S RT: NO PWHT: NO Boot Head Mat: _____ Nominal: _____ CA: _____

PSV DATA

Manufacturer: MERCER Serviced By: UNIFIED VALVE

Model: 91-17D51V07E1 Service Date: 2-AUG-19

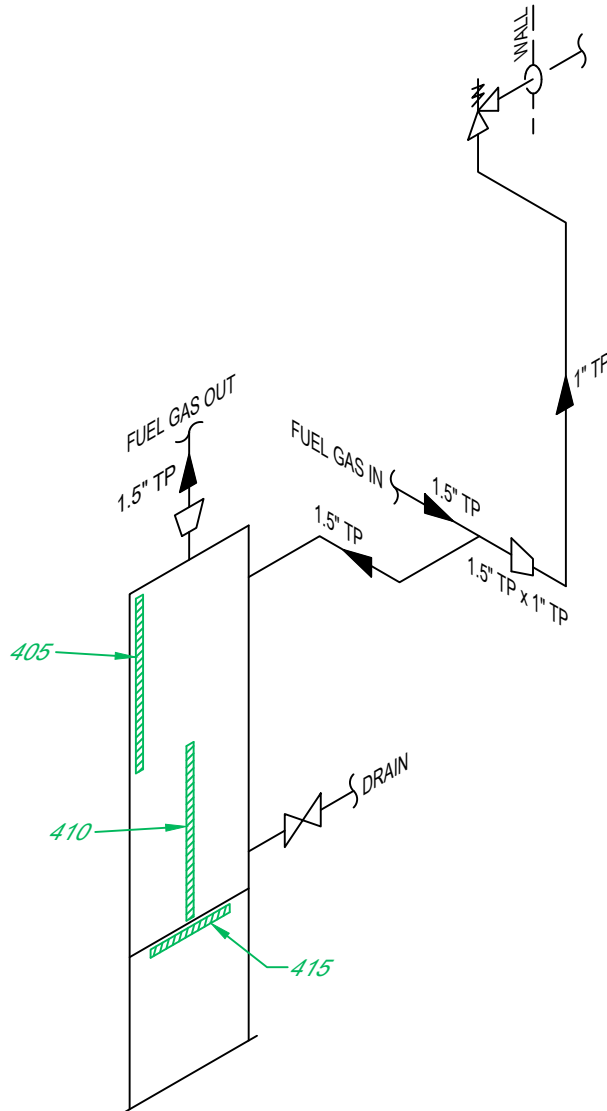
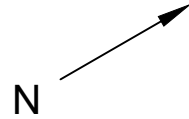
Serial: 556433 Code Stamp: UV

Set Pressure: 1034 kPa CRN: OG8841.5C

Capacity: 329 scfm Location: INLET PIPING

Tag: N/S Inlet Size: 1" MT

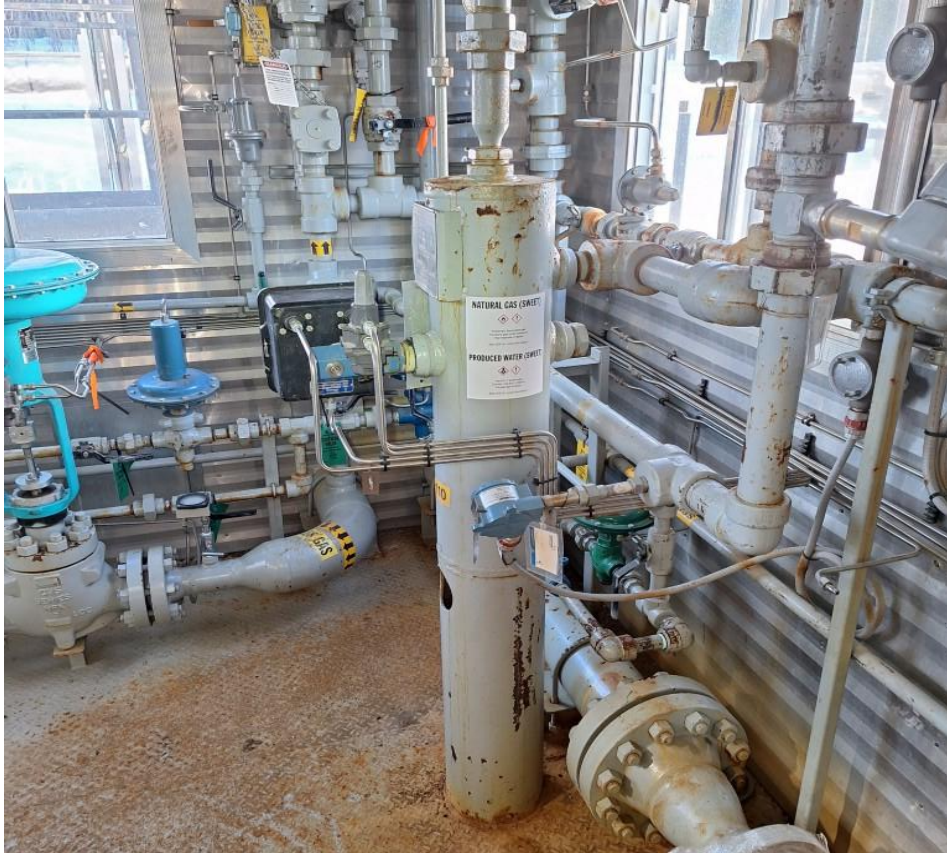
Flows To: N/S Outlet Size: 1" FT



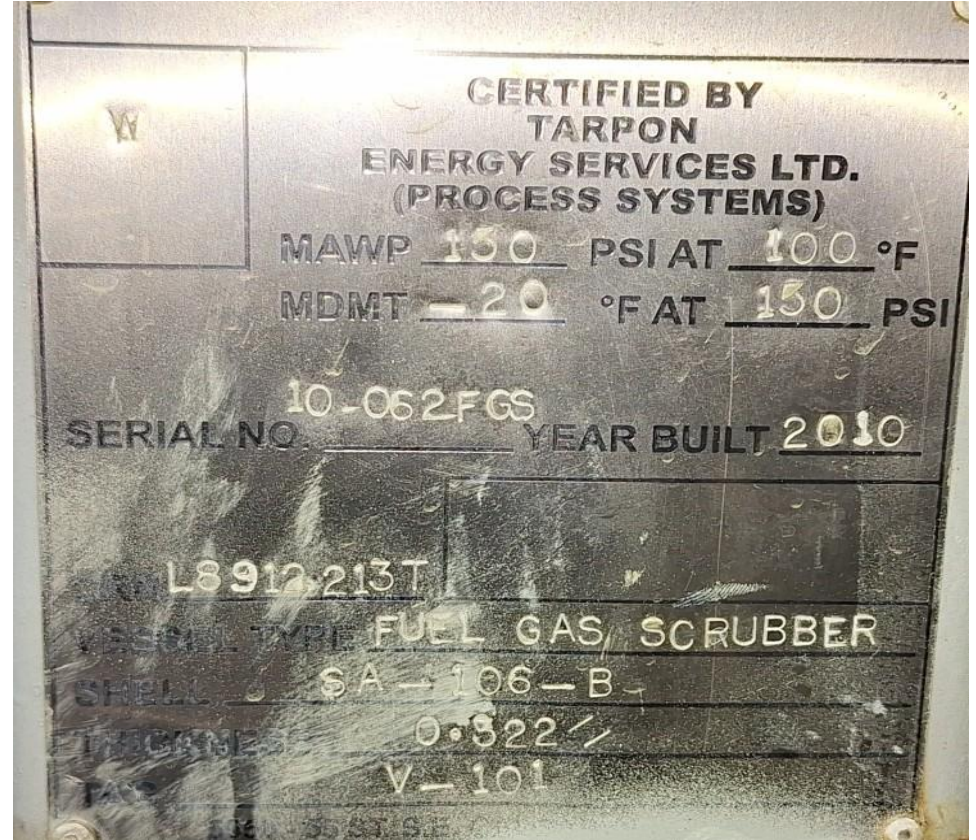


Client: **Fuelled**
Unit #: **n/s**
Equip Description: **Fuel Gas Scrubber**
Serial #: **10-062-FGS**
Drawing #: **3**

Vessel Overview



Data Plate





UTS Data Sheet

Client: **Fuelled**
Unit #: **n/s**
Equip Description: **Fuel Gas Scrubber**
Serial #: **10-062-FGS**
Drawing #: **3**

	Nominal Thickness (mm)	Corrosion Allowance (mm)	Flag Thickness (mm)
405			
Description: Upper Shell	8.2		6.7
Date: Jan. 20, 26			
Minimum: 7.9			
Average: 8.3			
Comments:			
410			
Description: Lower Shell	8.2		6.7
Date: Jan. 20, 26			
Minimum: 7.9			
Average: 8.3			
Comments:			
415			
Description: Bottom Head	8.2		6.7
Date: Jan. 20, 26			
Minimum: 15.9			
Average: 16.2			
Comments: <i>Jan 2026_Limited access due to surface corrosion.</i>			