

ABBREVIATIONS

Abbreviation/ Acronym	Definition
DP	Dynamic Positioning
DSV	Diving Support Vessel
DWG / DXF	Drawing Exchange Format (CAD data file formats)
kg	Kilogram
PIC	Person In Charge
SWL	Safe Working Load
TUP	Transfer Under Pressure (Diving system)
WLL	Working Load Limit

TABLE OF CONTENTS

1	INTRODUCTION.....	8
2	NOBEL TEN SATURATION DIVING SYSTEM.....	9
2.1	3 x MAN Diving Bell.....	9
2.2	<i>A-FRAME / LARS FOR BELL LAUNCH & RECOVERY.....</i>	13
2.3	TROLLEY FRAME, WINCHES & WIRES.....	15
2.4	<i>MAIN BELL UMBILICAL (MBU) & BASKET</i>	17
2.5	SATURATION CONTROL.....	17
2.6	<i>SATURATION DIVING CONTROL.....</i>	20
2.7	TOOL/WORKSHOP CONTAINER	Error! Bookmark not defined.
2.8	<i>ECU CONTAINER</i>	23
2.9	GAS RECLAIM SYSTEM CONTAINER.....	26
2.10	<i>HRC & LAUNCHING SYSTEM.....</i>	28
2.11	TUP/DDC1 SKID	31
2.12	<i>LIFE SUPPORT PACK (LSP) OR FLY AWAY PACK</i>	35
2.13	DDC 2.....	38
2.14	<i>STOREROOM/ET/MT.....</i>	40
3	AIR DIVING SYSTEM	ERROR! BOOKMARK NOT DEFINED.
3.1	DIVER CONTROL PANEL.....	Error! Bookmark not defined.
3.2	<i>COMPRESSION CHAMBER</i>	Error! Bookmark not defined.
3.3	AIR DIVING HELMETS & EQUIPMENT	Error! Bookmark not defined.
3.4	<i>AIR DIVING DEDICATED O2 & AIR QUADS.....</i>	Error! Bookmark not defined.
3.5	<i>AIR DIVING LARS & BASKET</i>	Error! Bookmark not defined.
3.6	<i>RHIB BOAT.....</i>	Error! Bookmark not defined.
3.7	<i>HPU & HYDRAULIC HOSE REEL</i>	Error! Bookmark not defined.
3.8	<i>GASSES & SODA SORB.....</i>	Error! Bookmark not defined.
3.9	<i>FALCON ROV.....</i>	Error! Bookmark not defined.
3.10	<i>ADDITIONAL ITEMS.....</i>	Error! Bookmark not defined.
4	CONCLUSION	44

1 INTRODUCTION 2024

This document describes the currently noted details and brief inventory the Nobel Ten Saturation Diving System located in Takoradi, Ghana.

The equipment detailed below is currently located in Takoradi, Ghana since it has completed the last project in August 2023.

The equipment is being sold as-is where-is and the purpose of this inspection/suitability study was to confirm all of the inventory listed by the seller of the equipment as was informed to the buyers, as well as to identify the overall condition of the system along with compiling a full report to bring the equipment in line with current and up to date IMCA regulations & guidelines.

The equipment in this report has been laying idle since the completion of the last project in August 2023

Our Company was contracted by the seller to De-Mobilize the system off the barge it was located on and into a customs bonded warehouse facility located in Takoradi, Ghana in April 2024.

The equipment is stored in a secure facility/location.

The current location the equipment is being stored in has yard and warehouse space dedicated (at the moment) solely to this equipment. There is an ample amount of space to accommodate building the systems up to be able to conduct a thorough seal/leak test, function testing, load testing, MPI, etc...

It is the intent of our Company along to compile a technical and operational team to re-visit the warehouse location and commence the full upgrade of this system and all equipment to industry (IMCA) standards as soon as possible and make it ready for the upcoming projects for the organizations.

We have identified in Takoradi, Ghana, contractors and suppliers that are capable and willing to provide labor, equipment, logistic, procurement and operational support at short notice and at a reasonable cost.

The aim is to conduct 24 x hour operations, working around the clock in order to complete these tasks and have this system fully ready.

Accommodation in Takoradi, Ghana is located a 2-3 min walk from the warehouse that all of the equipment is located in and the port is an additional 10 min walk from there.

2 NOBEL TEN SATURATION DIVING SYSTEM

2.1 3 X MAN DIVING BELL

TO INSERT MAKE, MODEL AND SERIAL NUMBER HERE

DESCRIPTION:	VISIBLE CONDITION:	NOTES:
Bell Locking Mechanisms	Good	Need to do a function test
Bell Lifting Padeye	Good	Need to do a Load Test
Overboard Gas Cylinders	Good	Need to be certified and Tested
Viewports	Good	All certifications are in date
Overall Exterior	OK	Needs to be Blasted, Painted & all gauges calibrated
Bell Wire Guides	Good	
Overall Interior	Good	All Gauges need to be calibrated
Anodes / Cathodic Protection	Good	Secured in place and only 5% depleted
Pipework & Whips (Internal & External)	TBC	Needs to be function tested
Bell Lighting & Cameras (Internal & External)	TBC	Needs to be function tested
All Electrical (Internal & External)	TBC	Needs to be function tested
All Valves & Fittings (Internal & External)	Good	Needs to be function tested
Tup Mating Trunk	Good	Needs to be seal tested
Spares	OK	Will need additional spares
Bottom Hatch	Good	Needs to be seal tested
Bell Medical Lock	Good	Needs to be seal tested
Twin Set Bailout Bottles & ARVEST Harnesses	Good	Cylinders need to be tested & certified
Bell Wire Connection	Poor	Wire has been cut and removed from the socket. It will need to be re-connected with a new socket and load Tested
Bell Excursion Umbilicals	Good	All need to be tested

Summary:

The overall condition of the 3 x man saturation diving bell appears to be in good visible condition. All items listed above are very minor and can be rectified quickly and efficiently.

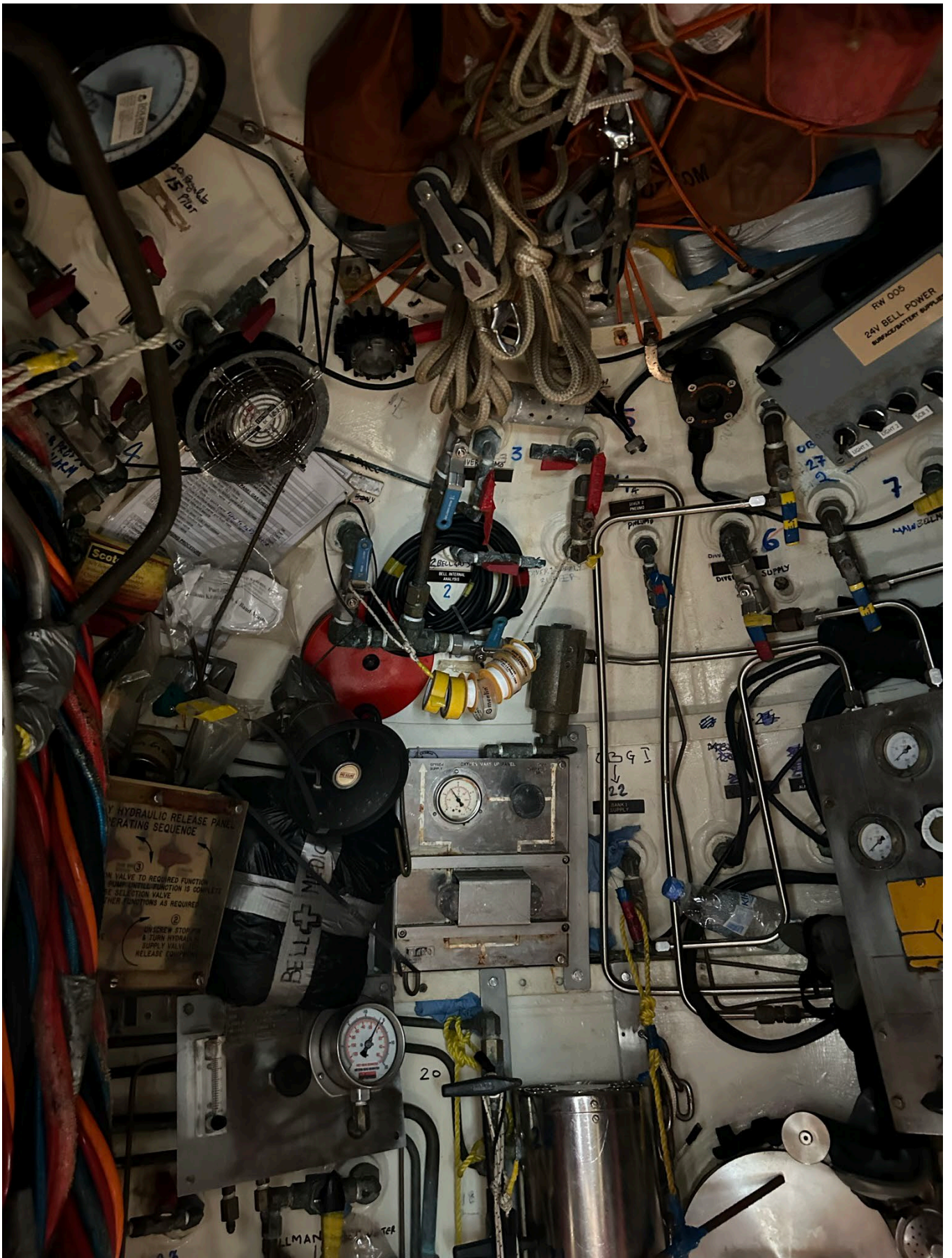
There will be a requirement to conduct a seal/leak test which can be facilitated by using an air compressor / Nitrogen Quads and qualified technicians.

In addition to the seal/leak test, a load test for the bell, MPI, re-calibration of all gauges, blasting and painting can be done utilizing load cells, MPI unit, a suitable crane, Generator and qualified technicians.

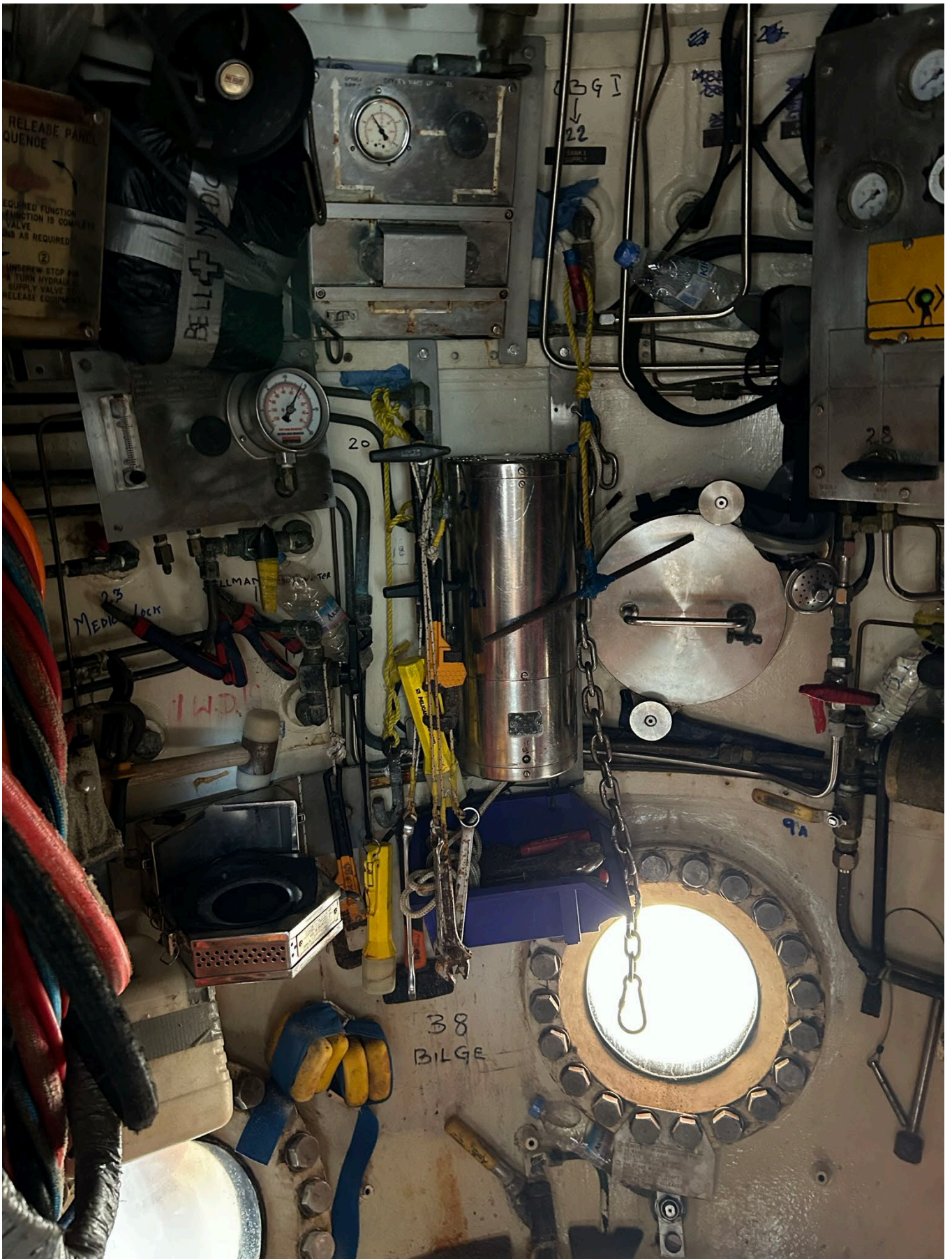
Photographs:



Bell to TUP Mating



Bell General Internal Area



Internal Bell Viewport

2.2 A-FRAME / LARS FOR BELL LAUNCH & RECOVERY

TO INSERT MAKE, MODEL AND SERIAL NUMBER HERE

Description:	VISIBLE CONDITION:	NOTES:
Overall Exterior	OK	Needs blasting & Painting
Pulley & Sockets	OK	Needs to be blasted, painted and sockets replaced
Hydraulic Winches	Good	Needs to be function tested, some basic fittings replaced, brakes tested & Hydraulics Serviced
Wire Rope	Good	Needs wire re-certification, greased, socket fastening & function tested
Ladder	Good	Needs to be Blasted & Painted
Wire Guides	OK	Needs to be blasted & Painted
Constant Tensioner	OK	Needs to be blasted, painted and function tested
Anodes / Cathodic Protection	Good	Secured in place and only 5% depleted
Pipework & Whips (Internal & External)	TBC	Needs to be function tested
Bell Lighting & Cameras (Internal & External)	TBC	Needs to be function tested
All Electrical (Internal & External)	TBC	Needs to be function tested
Spares	OK	Will need additional spares
All Valves & Fittings (Internal & External)	Good	Needs to be function tested
Tup Mating Trunk	Good	Needs to be seal tested
Bottom Hatch	Good	Needs to be seal tested
Bell Wire Connection	Poor	Wire has been cut and removed from the socket. It will need to be re-connected with a new socket and load Tested
Bell Excursion Umbilicals	Good	All need to be tested

Summary:

The overall condition of the 3 x man saturation diving bell appears to be in good visible condition. All items listed above are very minor and can be rectified quickly and efficiently.

There will be a requirement to conduct a seal/leak test which can be facilitated by using an air compressor and qualified technicians.

In addition to the seal/leak test, a load test for the bell, MPI, re-calibration of all gauges, blasting and painting can be done utilizing load cells, MPI unit, a suitable crane, Generator and qualified technicians.

Photographs:



Bell A Frame Winch

2.3 TROLLEY FRAME, WINCHES & WIRES

TO INSERT MAKE, MODEL AND SERIAL NUMBER HERE

Description:	VISIBLE CONDITION:	NOTES:
Overall Exterior	OK	Needs blasting, painting, badging and labelling
Pulley & Sockets	OK	Needs to be blasted, painted and sockets replaced
Hydraulic Winches	Good	Needs to be function tested, some basic fittings replaced, brakes tested & Hydraulics Serviced
Wire Rope	Good	Needs wire re-certification, greased, socket fastening & function tested
Ladder	Good	Needs to be Blasted & Painted
Wire Guides	OK	Needs to be blasted & Painted
Pipework, hoses & Whips	TBC	Needs to be function tested
All Valves & Fittings	Good	Needs to be function tested & some fittings replaced
Padeyes	Good	Need to be load tested
Spares	OK	Will need additional spares

Summary:

The overall condition of the Trolley Frame, Winches & Wires appears to be in good visible condition. All items listed above are very minor and can be rectified quickly and efficiently.

There will be a requirement to conduct hydraulic servicing and load testing which can be facilitated by using an crane, load cells and qualified technicians.

In addition to the above, re-calibration of all gauges, blasting and painting can be done utilizing a Generator, painting supplies, calibration equipment and qualified technicians.

Photographs:



Trolley Winch

2.4 MAIN BELL UMBILICAL (MBU) & BASKET

TO INSERT MAKE, MODEL AND SERIAL NUMBER HERE

Description:	VISIBLE CONDITION:	NOTES:
Overall Exterior	OK	Needs blasting & Painting
Pulley & Sockets	OK	Needs to be blasted, painted and sockets replaced
Main Bell Umbilical (MBU)	OK	Needs testing and an additional spare bell umbilical procured

Summary:

The overall condition of the Main Bell Umbilical (MBU) appears to be in good visible condition. All items listed above are very minor and can be rectified quickly and efficiently.

There will be a requirement to conduct an electrical and pressure test which can be facilitated by using an air compressor, generator and qualified technicians.

2.5 SATURATION CONTROL

TO INSERT MAKE, MODEL AND SERIAL NUMBER HERE

Description:	VISIBLE CONDITION:	NOTES:
Overall Exterior	Good	Needs blasting & Painting, penetrator panel needs new badging/labelling
Sewage Treatment facility	OK	Needs to Re-Labelled and outer insulation needs to be redone on one of the units
Valves & Pipework	OK	Most of the valves on the control panels need to be replaced
Spares	OK	Additional Spares will be required
Control Panels	OK	All gauges need to be calibrated & tested
Communications	Good	Need to be tested

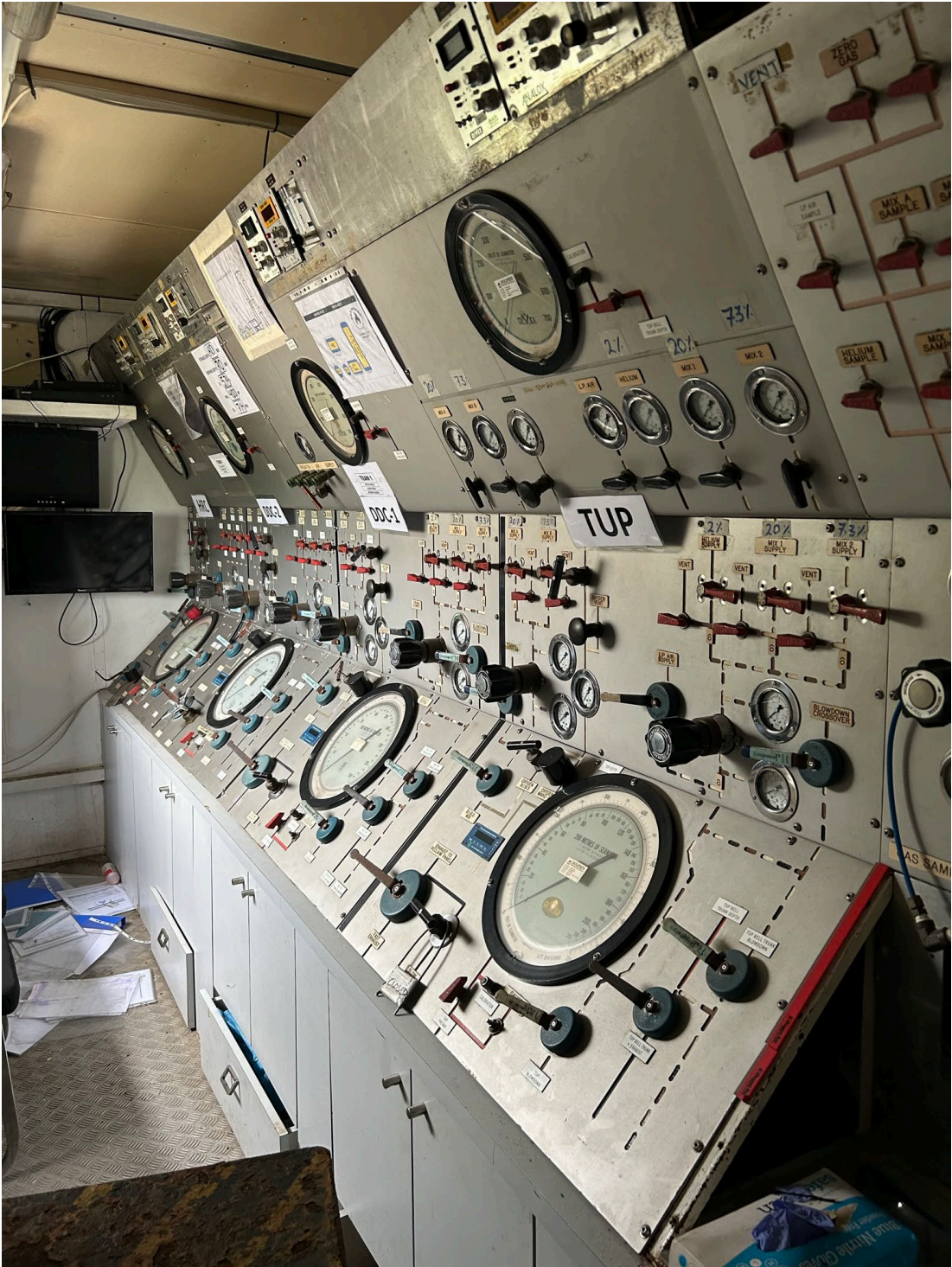
Summary:

The overall condition of the saturation Control appears to be in good visible condition. All items listed above are very minor and can be rectified quickly and efficiently.

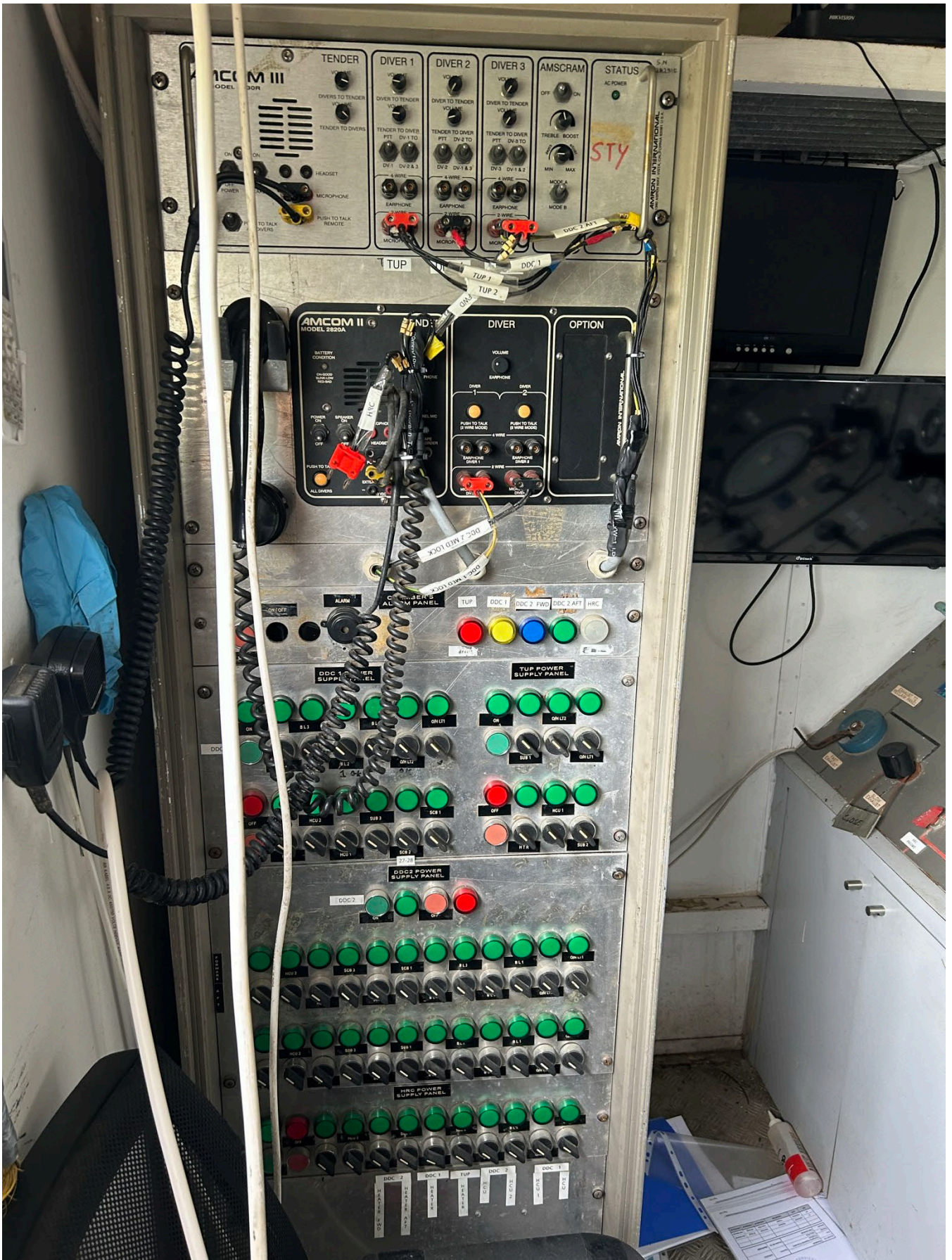
There will be a requirement to conduct a leak test which can be facilitated by using an air compressor and qualified technicians.

In addition to the leak test, re-calibration of all gauges, blasting and painting can be done utilizing a Generator air compressor and qualified technicians.

Photographs:



Saturation Control Panel



Saturation Control Unit

2.6 SATURATION DIVING CONTROL

TO INSERT MAKE, MODEL AND SERIAL NUMBER HERE

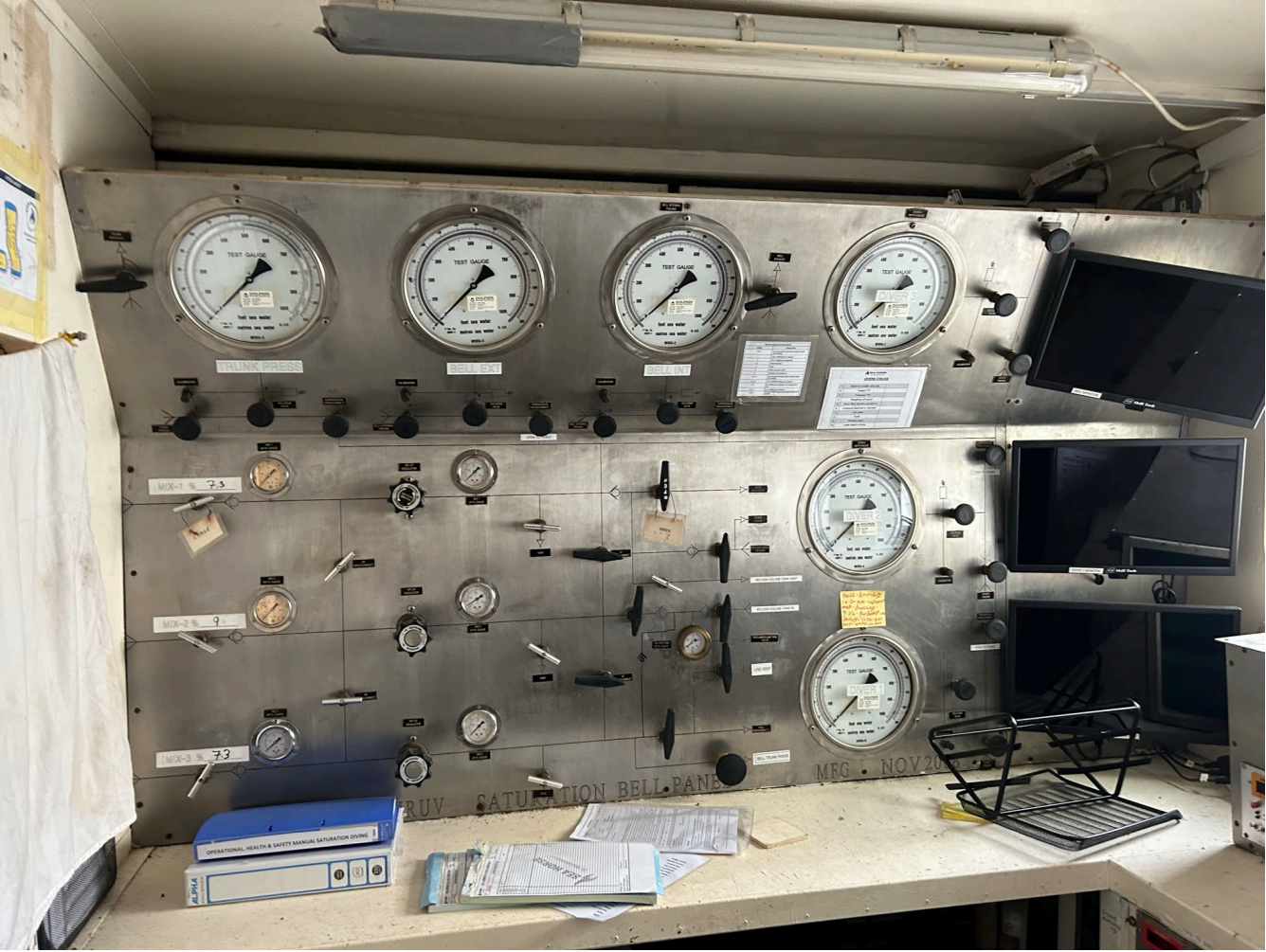
Description:	VISIBLE CONDITION:	NOTES:
Overall Exterior	OK	Needs blasting & Painting
Penetrator Panel	Good	All seems to be in Good Condition
AC Units	OK	Need to be serviced
Analyzers	Good	Needs to be tested
Gauges	Good	Need to be calibrated
Valves & Pipework	Good	Need to be tested
CCTV Monitors	Good	Needs to be tested
Power Supply	Good	Needs to be tested
Bailout Bottles & ARVEST	Good	Needs to be tested
Spares	OK	Additional required
Lighting	Good	Needs to be tested
Ultra Jewel Diving Helmets	Good	Needs to be inspected and certified
Bell Locator	Good	Needs to be tested

Summary:

The overall condition of the saturation diving control appears to be in good visible condition. All items listed above are very minor and can be rectified quickly and efficiently.

In addition, re-calibration of all gauges, Comms testing, blasting and painting can be done utilizing a Generator and qualified technicians.

Photographs:



Saturation Dive Control Panel



Saturation Dive Control Comms and Recording Uni

2.7 ECU CONTAINER

TO INSERT MAKE, MODEL AND SERIAL NUMBER HERE

Description:	VISIBLE CONDITION:	NOTES:
Overall Exterior	OK	Needs blasting & Painting
Hot Water Units	OK	Needs to be re-labelled
Stby Diver Chair	OK	Needs to be painted
DB Board	Good	Needs to be tested
CMU's	Good	Needs to be tested

Summary:

The overall condition of the ECU Container appears to be in good visible condition. All items listed above are very minor and can be rectified quickly and efficiently.

In addition, all of the testing can be completed utilizing a Generator and qualified technicians.

Photographs:



Hot Water Unit



CMU's

2.8 GAS RECLAIM SYSTEM CONTAINER

TO INSERT MAKE, MODEL AND SERIAL NUMBER HERE

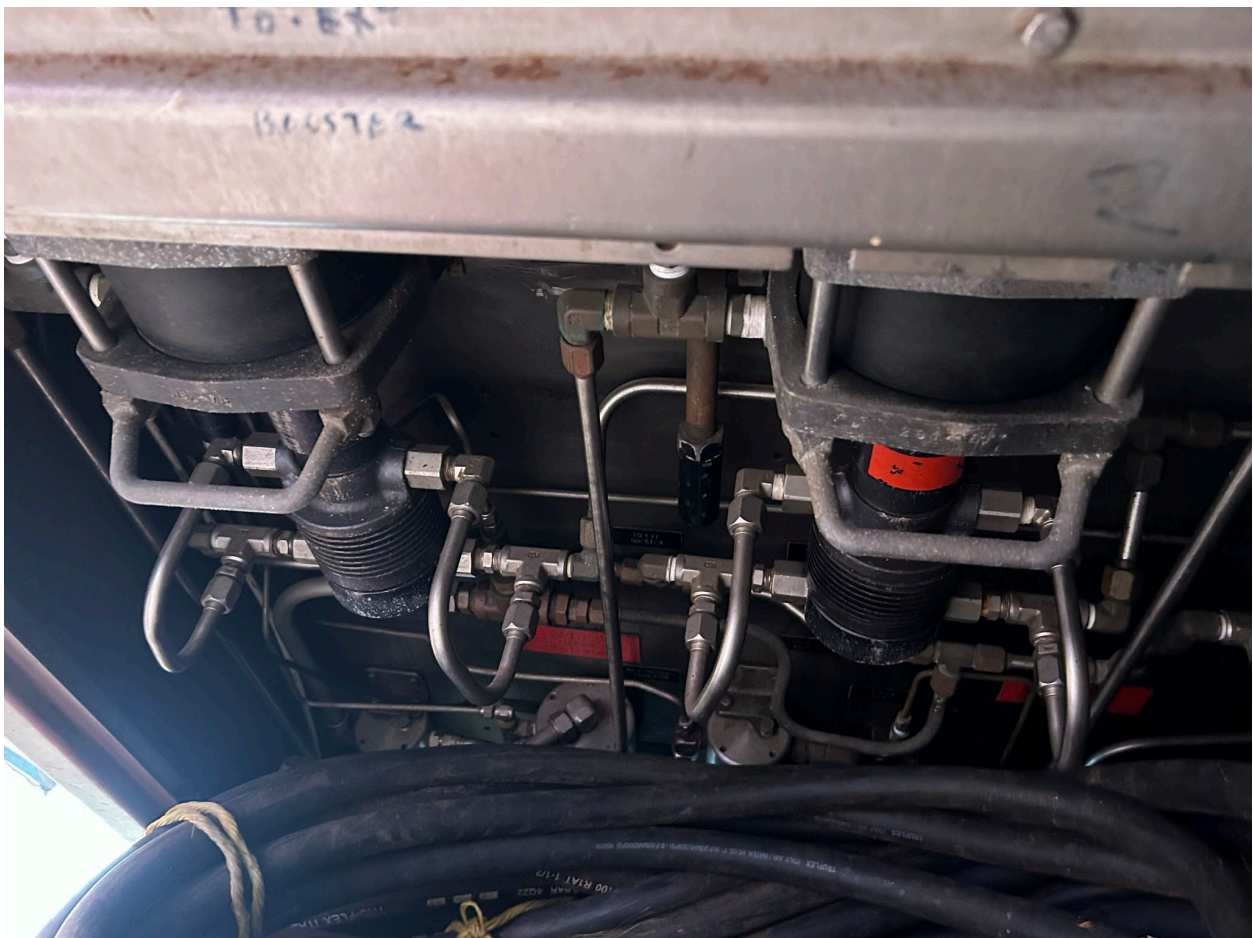
Description:	VISIBLE CONDITION:	NOTES:
Overall Exterior	OK	Needs some minor steel repairs, badging/labelling, blasting & Painting
Haskel Gas reclaim	Good	Needs to be tested
Spares	OK	Additional spares are required
Hoses, pipework, valves & Fittings	Good	All need to be tested and calibrated

Summary:

The overall condition of the Gas Reclaim Container appears to be in good visible condition. All items listed above are very minor and can be rectified quickly and efficiently.

In addition, all of the above testing can be accomplished utilizing a generator, calibration equipment, Generator and qualified technicians.

Photographs:



Gas Reclaim system



Haskel Pump on Gas Reclaim system

2.9 HRC & LAUNCHING SYSTEM

TO INSERT MAKE, MODEL AND SERIAL NUMBER HERE

Description:	VISIBLE CONDITION:	NOTES:
Overall Exterior	OK	Needs badging/labelling, blasting & Painting
Fittings	OK	Some of the fittings need to be replaced
Viewports	Good	Need to check certifications
Wire Rope	Good	Needs wire re-certification, greased, socket fastening & function tested
Ladder	Good	Needs to be Blasted & Painted
Wire Guides	OK	Needs to be blasted & Painted
Constant Tensioner	OK	Needs to be blasted, painted and function tested
Pipework & Whips (Internal & External)	OK	Needs to be function tested
All Electrical (Internal & External)	OK	Needs to be function tested
Internal Areas	TBC	Could not access
All Valves & Fittings (Internal & External)	OK	Needs to be function tested
Mating Trunking	Good	Needs to be seal tested

Summary:

The overall condition of the HRC & LAUNCHING SYSTEM appears to be in good visible condition. All items listed above are very minor and can be rectified quickly and efficiently.

There will be a requirement to conduct a seal/leak test which can be facilitated by using an air compressor and qualified technicians.

In addition to the seal/leak test, a load test for the HRC, MPI, re-calibration of all gauges, blasting and painting can be done utilizing load cells, MPI unit, a suitable crane, Generator and qualified technicians.

Photographs:



HRC Fittings/Connections



HRC Trunking and sealing face

2.10 TUP/DDC1 SKID

TO INSERT MAKE, MODEL AND SERIAL NUMBER HERE

Description:	VISIBLE CONDITION:	NOTES:
Overall Exterior	OK	Needs blasting & Painting
Locking Mechanism (TUP to Bell)	Good	Needs a seal test and hydraulic test
Trunking	Good	Needs a Seal Test
DDC 1 Med Lock	Good	Needs a Seal Test
Internal Areas	TBC	Could not access
TUP UNIT	OK	Valves need to be replaced, viewports certs need to be checked
DDC 1	OK	Valves need to be replaced, viewport certs need to be checked & Some minor fiberglass/insulation repairs required

Summary:

The overall condition of the TUP/DDC 1 SKID appears to be in good visible condition. All items listed above are very minor and can be rectified quickly and efficiently.

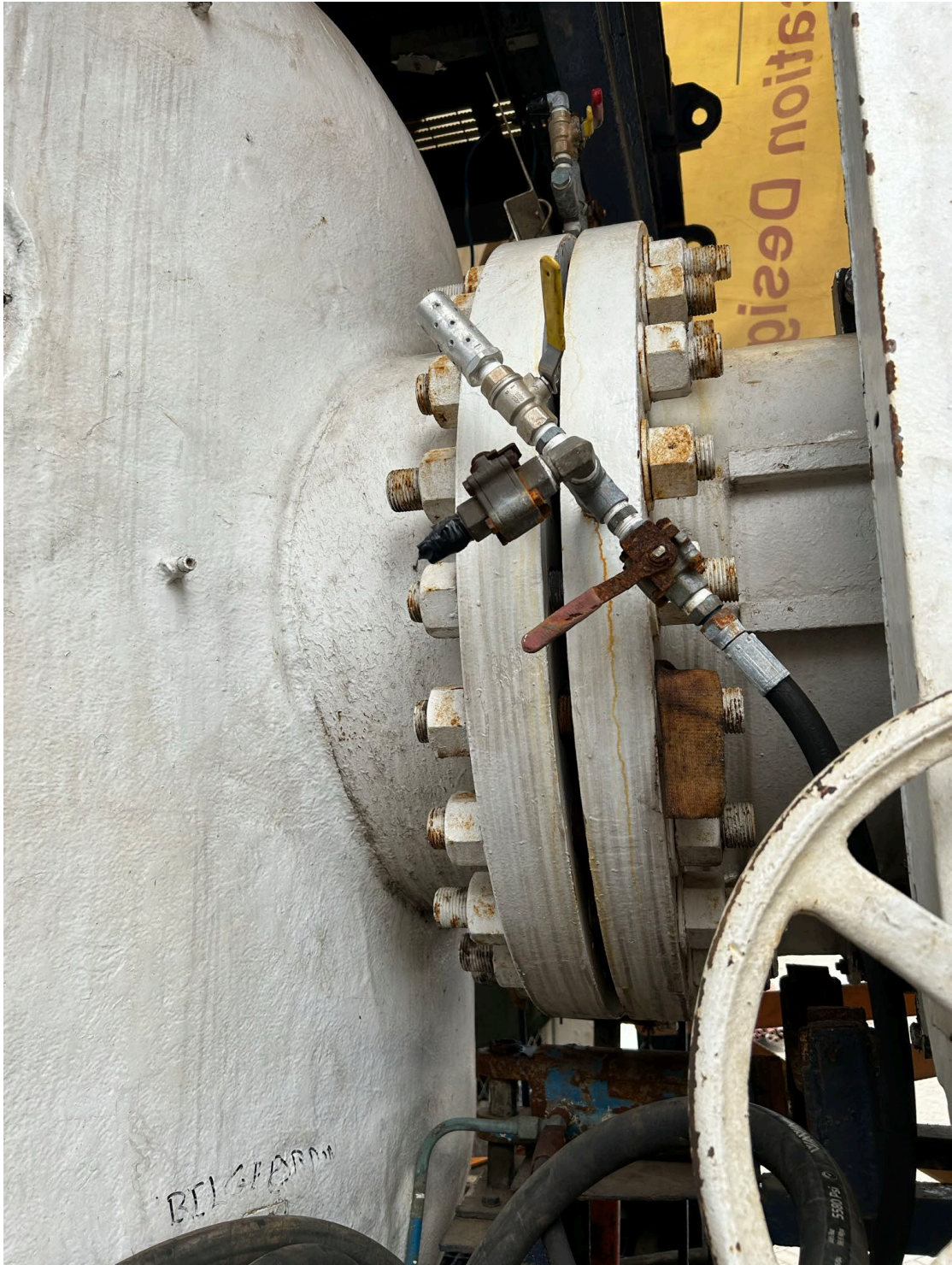
There will be a requirement to conduct a seal/leak test which can be facilitated by using an air compressor and qualified technicians.

In addition to the seal/leak test, re-calibration of all gauges, blasting and painting can be done utilizing load cells, Generator and qualified technicians.

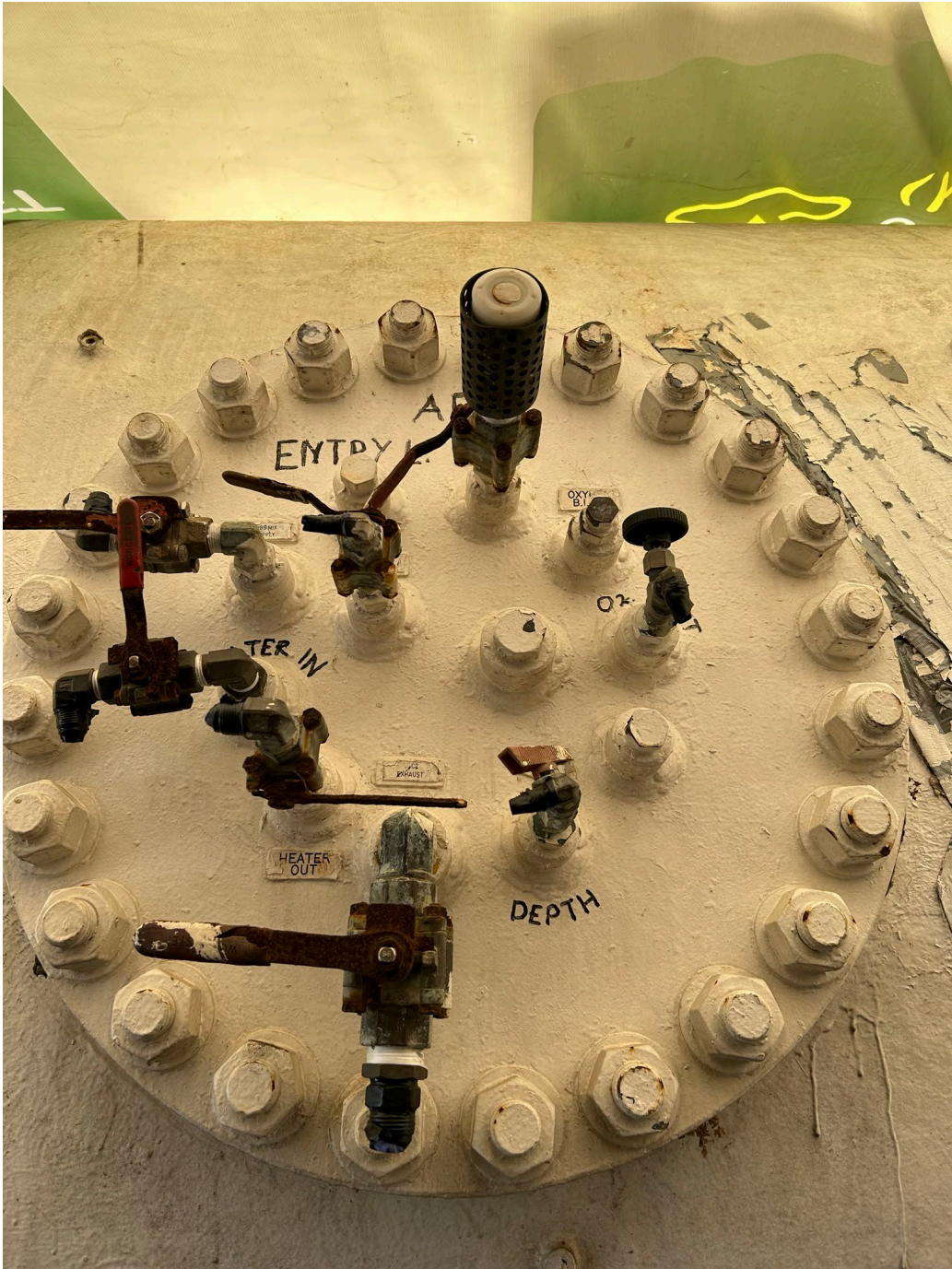
Photographs:



TUP Trunking & Sealing Face to Bell



TUP to DDC I Trunking



DDC 1 Penetrator Flange

2.11 LIFE SUPPORT PACK (LSP) OR FLY AWAY PACK

TO INSERT MAKE, MODEL AND SERIAL NUMBER HERE

Description:	VISIBLE CONDITION:	NOTES:
Overall Exterior	Good	Needs blasting & Painting
Penetrator Panel	Good	Some of the fitting will need to be replaced
BA Set	Good	Needs to be tested
Pulley System	Good	Needs to be tested
Soda Sorb	Good	All in date
Umbilicals	OK	Needs to be tested
Gas Panel	Good	Needs calibration and testing
Comms Unit	Good	Needs Testing
Cylinders	Good	Need to be tested and certified
Lighting	OK	Needs to be tested
All Electrical	OK	Needs to be function tested
Internal areas	TBC	Could not access Internal areas
All Valves & Fittings	Good	Needs to be function tested

Summary:

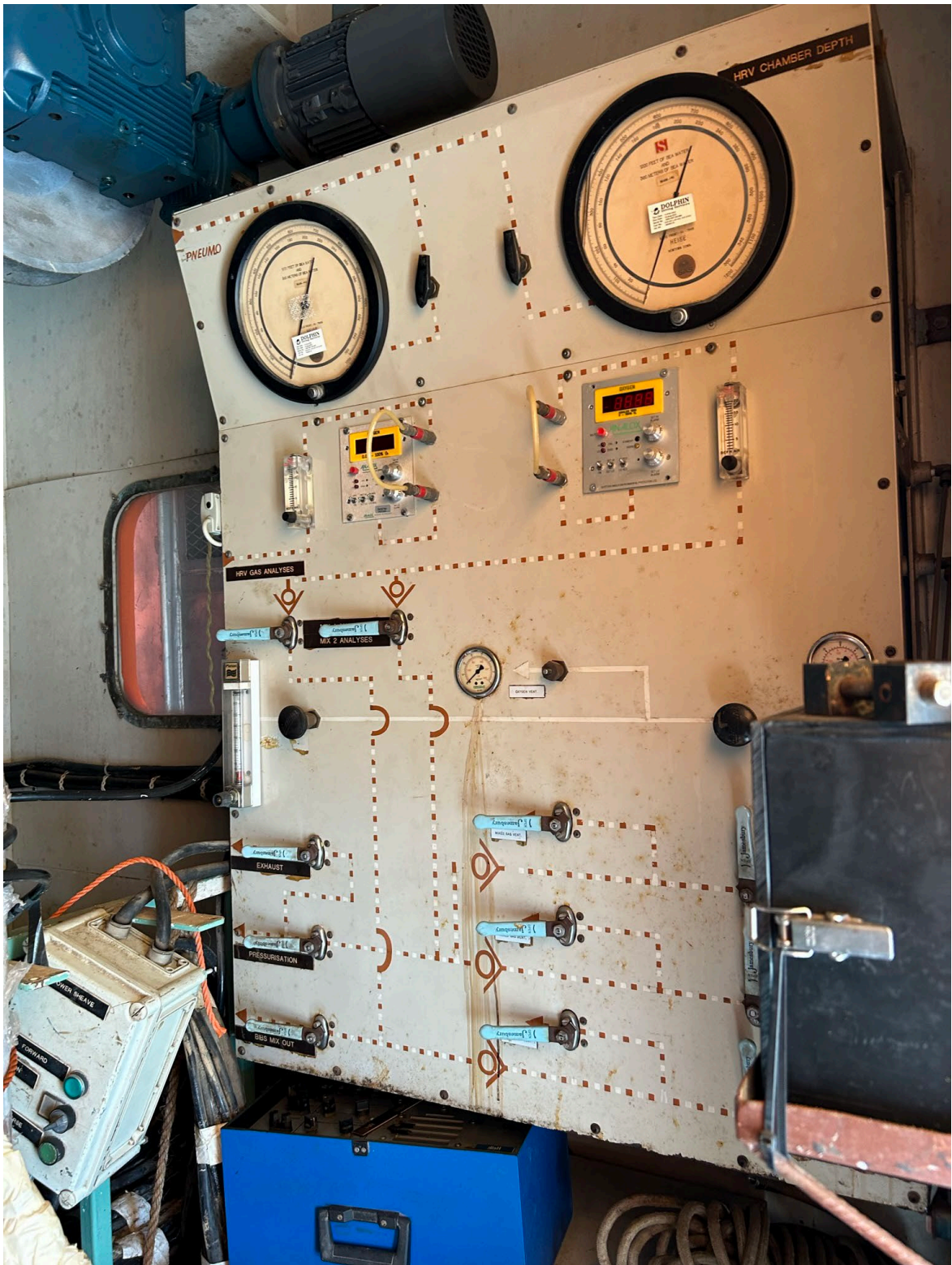
The overall condition of the Life Support Pack (LSP) or Fly Away Pack appears to be in good visible condition. All items listed above are very minor and can be rectified quickly and efficiently.

In addition, re-calibration of all gauges, blasting and painting can be done utilizing calibration equipment, air compressor, Generator and qualified technicians.

Photographs:



External Penetrator Panel



Panel for Fly Away Pack

2.12 DDC 2

TO INSERT MAKE, MODEL AND SERIAL NUMBER HERE

Description:	VISIBLE CONDITION:	NOTES:
Overall Exterior	OK	Needs minor fiberglass/insulation repairs, badging/labelling, blasting & Painting
Viewports	Good	Certifications need to be checked
Valves, fittings & Pipework	OK	Some of the valves and fittings need to be replaced
Penetrator Panel	Good	All look ok
Med Lock	Good	Needs to be seal tested
Trunking	Good	Needs to be seal tested
Internal areas	TBC	No Access

Summary:

The overall condition of the DDC 2 appears to be in OK visible condition. All items listed above are very minor and can be rectified quickly and efficiently.

There will be a requirement to conduct a seal/leak test which can be facilitated by using an air compressor and qualified technicians.

In addition to the seal/leak test, re-calibration of all gauges, blasting and painting can be done utilizing a Generator and qualified technicians.

Photographs:



DDC 2

2.13 *STOREROOM/ET/MT*

TO INSERT MAKE, MODEL AND SERIAL NUMBER HERE

Description:	VISIBLE CONDITION:	NOTES:
Overall Exterior	OK	Needs minor steel repairs, blasting & Painting
AC Unit	OK	Needs Servicing
Hydraulic Hand Pump	Good	All OK
Hand Tools and various Tooling	Poor	Needs to be cleaned up, all tooling fully inventoried, proper tool boxes, shelving added
Compressed Air Manifold	OK	Needs to be tested
Hydraulic Control Unit for Bell	OK	Needs to be tested
DIVEX BIBS	OK	Need to be tested
Fittings, hoses, valves, connectors	OK	All needs to be tested
Lighting	OK	Needs to be tested

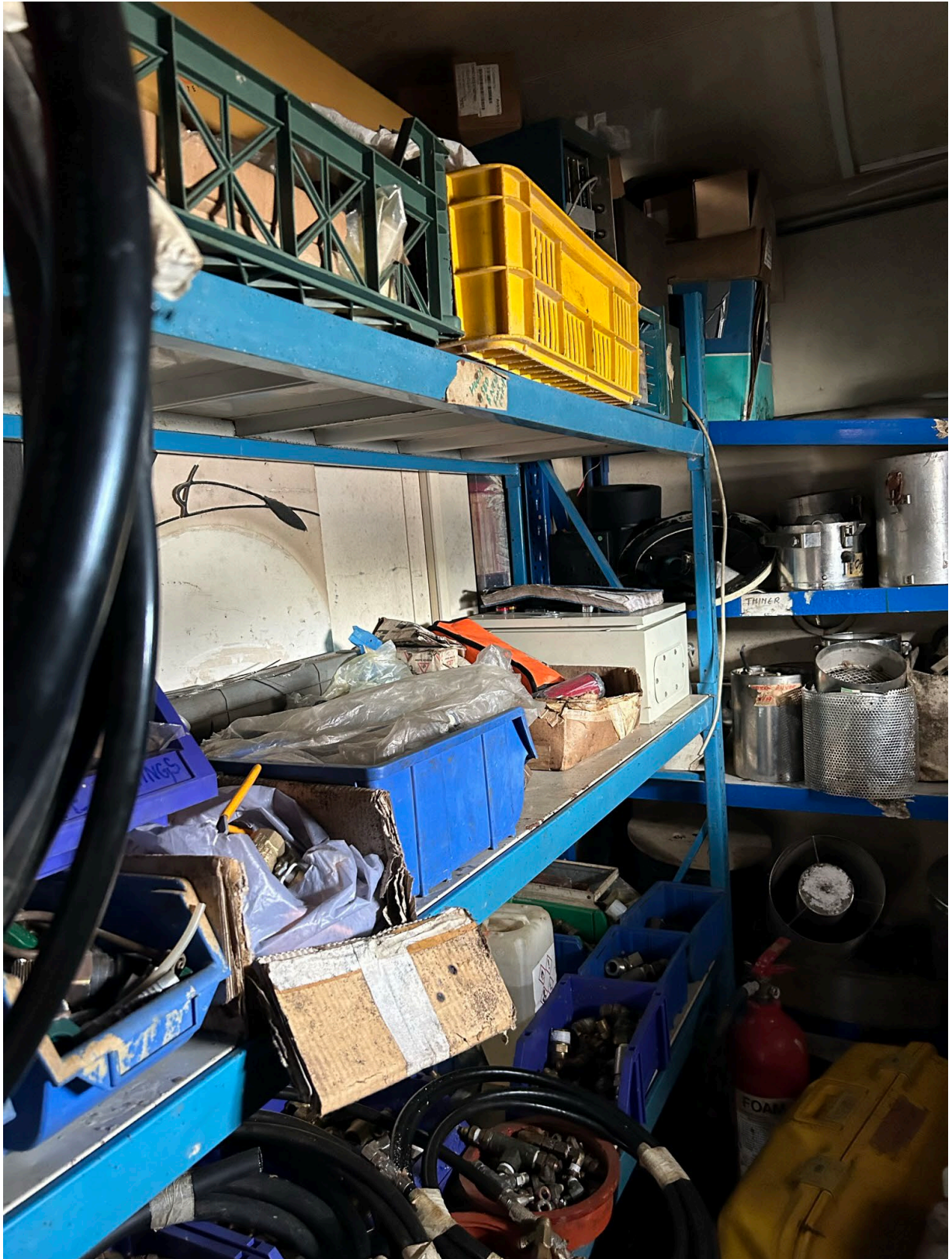
Summary:

The overall condition of the Storeroom/ET/MT appears to be in Poor visible condition. However, all items listed above can be rectified quickly and efficiently.

Photographs:



Compressed Air Panel



Shelving and Various Spares

3 CONCLUSION

The Nobel Ten Saturation Diving System is in an overall decent condition. All of the rectifications/upgrades visually noticeable are all minors and can easily be remedied.

The system does require to be fully seal/leak tested and all certifications need to be updated.

The most undertaking task will be blasting and painting the complete system and replacing valves and fittings.

This inspection was purely a visual inspection to record the noticeable defects and to understand to what extent it would take to bring the system to IMCA standards and commence diving operations.

At the time of the inspection not all internal areas were accessible. However, from what was inspected it appears to be an overall suitable system based on completion of the seal/leak test, complete build up of the system, replenishment of all critical spares and function testing along with calibration and re-certifications.

Overall the complete package seems to be in decent condition. However, it appears on initial inspection that the complete refurbishment of this system would take around 80 days and additional cost of approx. US \$750K.

To follow will be a full timeline/ schedule and financial model in order to bring this system and all ancillary items in good operational/ safe order, as per IMCA requirements.