



Model: Driller's Cabin, Power House, TDSU Building  
Serial #: All

Jul. 13, 2015

Product Bulletin # PHDC-009  
Alert



## Preservation and Storage Procedure

### Issue

Moisture can form inside the Driller's Cabin, Power House, or TDSU Buildings when stored improperly. Powering up any of these buildings with moisture present inside the actual building and/or cabinets may present a safety risk to personnel and may cause serious damage to equipment.

### Recommendation

Buildings are protected against moisture for 30 days from date of shipment. Desiccant bags must be replaced every 30 days during storage. Follow instructions described in the Engineering document: *Preservation and Storage Procedure* (ENG 50583) prior to shipping and/or storage of these buildings.



Note: Document ENG 50583 is attached to this product alert for reference only. Always refer to the latest version of this document located on NaborsNet (SharePoint).

## Requirements

See ENG 50583 for quantities required for each building.

- C10476 – Desiccant Bag
- DT22527 – LABEL PRESERVATION, REV A



### SAFETY:

Wear recommended PPE and follow all applicable safety procedures prior to performing any work on these buildings. A Job Safety Analysis (JSA) must be completed daily and signed by all personnel who will be working in the area.



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**IMPORTANT SAFETY INFORMATION**

Personnel working in or on Canrig Drilling Technology LTD equipment, project or a Canrig facility shall follow all applicable Canrig Health, Safety and Environment policies and if appropriate, the customer’s Health, Safety and Environment policies. In addition, all personnel shall have received documented training from a competent person pertaining to their planned activities prior to beginning any work or accessing any equipment on a Canrig site or at a Canrig facility.

**RECOGNIZED SAFETY SYMBOLS, WORDS AND LABELS**

**⚠ DANGER**

**DANGER:** indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

**⚠ WARNING**

**WARNING:** indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

**⚠ CAUTION**

**CAUTION:** indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury or product or property damage.

**CAUTION**

**CAUTION:** used without the safety alert symbol, indicates a potentially hazardous situation which, if not avoided, MAY result in property damage.

**NOTICE**

**NOTICE:** indicates information or a company policy that relates directly or indirectly to the safety of personnel or protection of property.

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**REVISION HISTORY**

**Revision History**

<i>Revision Number</i>	<i>Description</i>	<i>Prepared/ Changed By (Name)</i>	<i>Effective Date of Change</i>	<i>Approved By (Name)</i>	<i>Approval Date</i>
Rev. 00	Initial Release	S. Minnie	2015-06-17	D. Adam	2015-07-06

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**1.0 SCOPE**

The purpose of this document is to provide a guideline for preservation all Powerhouse, Drillers Cabin and TDSU buildings prior to shipping or storage.

**2.0 SAFETY**

**2.1. Personal Protective Equipment (PPE)**

Standard PPE as required per NFPA 70E – Standard for Electrical Safety in the Workplace

**2.2. Safety and Preparations**

All standard shop practices and safety procedures are to be followed.

 <b>DANGER</b>
<p><b>DANGER: SHOCK HAZARD</b> – High voltage and potentially lethal shock hazards are present. Only perform the building preservation after Factory Acceptance Testing has been completed. Ensure that all Canrig safety rules and regulations are followed to completely power down the building in preparation for shipment.</p>

**2.3. Safety Compliance**

Before beginning any procedure, be certain that appropriate training, safety equipment, Lock-Out Tag-Out (LOTO) and any other applicable policies and procedures are identified and adhered to. A Job Safety Analysis (JSA) must be completed daily and signed by all personnel who are to be working in the area and to this procedure.

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**3.0 GENERAL GUIDELINES**

Place desiccant bags in cabinets and open spaces of the Powerhouse, Drillers Cabin and TDSU buildings. Use the following principles and suggested locations for the optimum layout:

- 3.1. Remove the metal carabineers that are supplied with each desiccant bag (Part number C10476) and discard to prevent accidental future electrical contact. Use zip ties to hang the bags in place.
- 3.2. Place desiccant bags in large open volume areas at 6-10 ft intervals. Hang as high as possible and at least 6’6” from the floor in walkways.
- 3.3. Only place desiccant bags inside cabinets where there is sufficient room for the bags to hang freely. Avoid placement on shelves or in areas above sensitive electrical equipment as saturated desiccant bags may drip. The pictures in paragraph 6 show examples of acceptable installation.
- 3.4. Aim for a minimum of 12 desiccant bags in each Powerhouse and Drillers cabin building, with the largest concentration inside cabinets and in the equipment side of a divided building. Place a minimum of 5 desiccant bags in each TDSU building.
- 3.5. Mark each entrance door with a label (Part number DT22527) to indicate the date of preservation and quantity of desiccant bags in the building.
- 3.6. Mark each cabinet that has a desiccant bag inserted with a label (Part number DT22527) to indicate the date and quantity of desiccant bags that have been placed inside the cabinet.

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**4.0 REFERENCES**

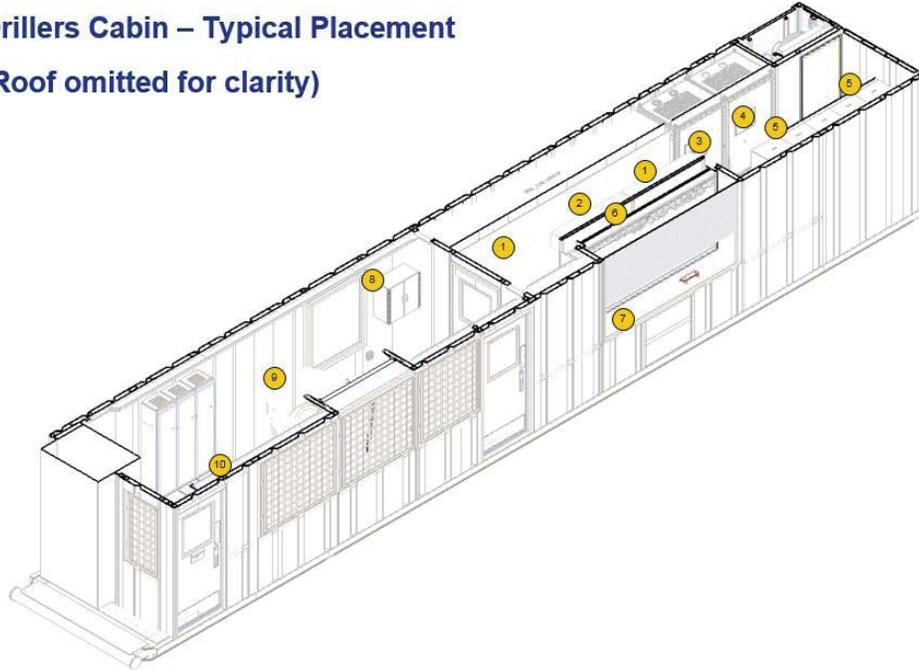
- 4.1. C10476 – Desiccant Bag
- 4.2. DT22527 – Label, Preservation
- 4.3. Document ID 13-004 – Pace X Drillers Cabin testing manual
- 4.4. Document ID 12-118 – Pace X Power House testing manual
- 4.5. ENG 300 – Control of Engineering Documents
- 4.6. MFG 122 – Pre-inspection checklist
- 4.7. MFG 105 – FINAL walk thru checklist
- 4.8. NFPA 70E – Standard for Electrical Safety in the Workplace
- 4.9. QMS 302 – Quality Records

**5.0 RECORDS**

This document is to comply and be maintained per Canrig document, QMS 302 – Quality Records.

## 6.0 EXAMPLES OF ACCEPTABLE METHODS OF INSTALLATION

### Drillers Cabin – Typical Placement (Roof omitted for clarity)



**1. INSIDE DWA DISCONNECT / DWA  
INVERTER SECTION**



**2. INSIDE DWB DISCONNECT / TD  
OUTPUT REACTOR SECTION**



**3. INSIDE PLC / SERVER CABINET**



**4. INSIDE WRENCH PLC CABINET**



**5. IN LARGE VOLUME OPEN SPACE**



**6. ADJACENT TO PLUG PANEL**



**7. BELOW PLUG PANELS**



**8. ADJACENT TO WINDOW**

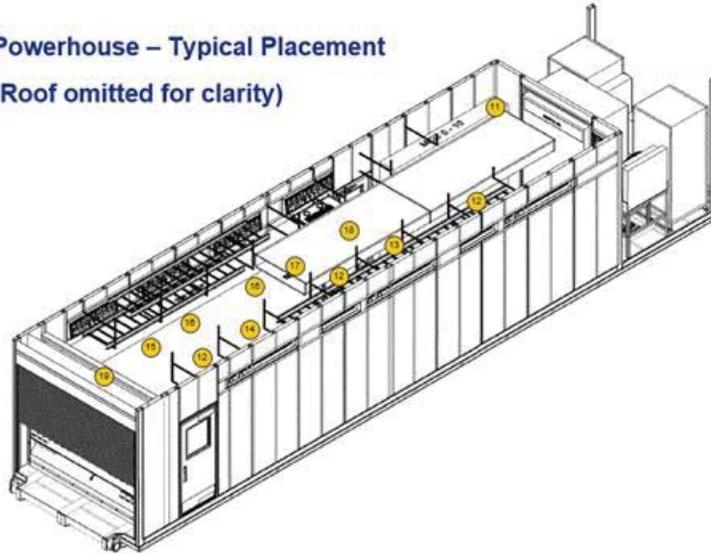


**9. ADJACENT TO DRILLER'S CHAIR**



**10. ADJACENT TO ENTRANCE DOOR**

**Powerhouse – Typical Placement  
(Roof omitted for clarity)**



**11. OPEN SPACE IN POWERHOUSE**



**12. MP DISCONNECT SECTION**



**13. DB CHOPPER (DS-4A) SECTION**



**14. MP OUTPUT REACTOR SECTION**



**15. DRILLER CABIN FEEDER**



**16. GENERATOR**



**17. POWERHOUSE MCC FEEDER**

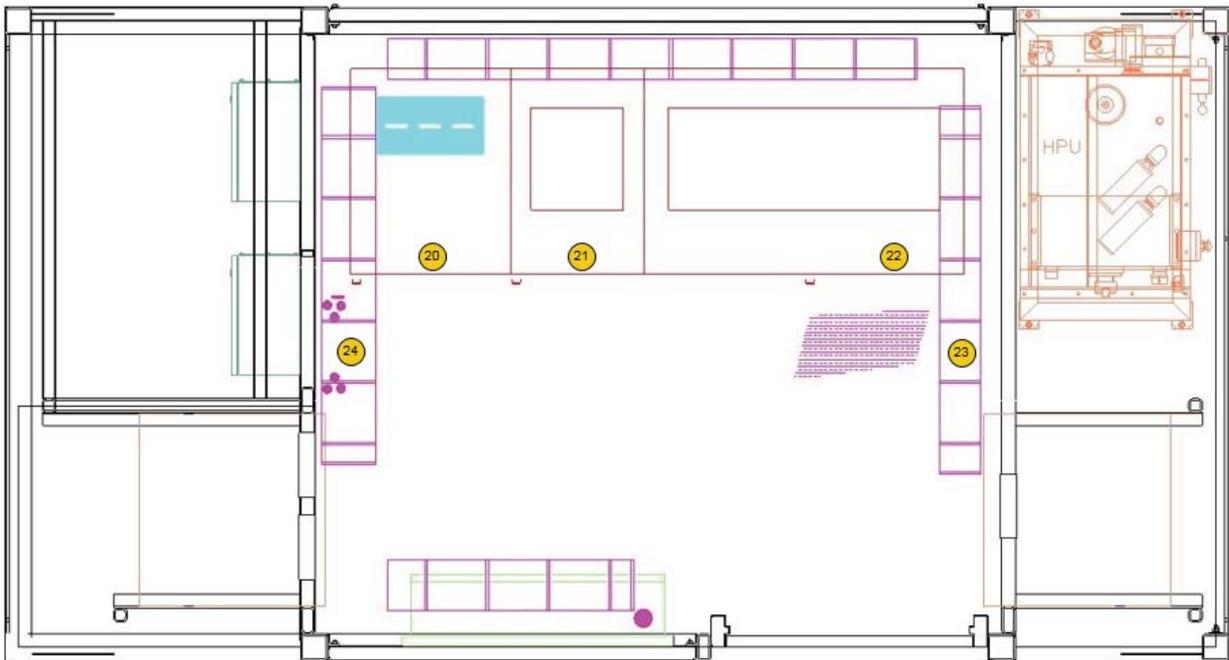


**18. SERVER**



**19. INSIDE PLUG PANEL**

### TDSU – Typical Placement



**20. MAIN DISCONNECT SECTION**



**21. RECTIFIER SECTION**



**22. INVERTER SECTION**



**23. RH OPEN SPACE**



**24. LH OPEN SPACE**

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Example of completed label

<b>NOTICE</b>
<p><b>THIS BUILDING HAS BEEN PRESERVED FOR 30 DAYS FROM <u>2015-06-19</u> (DATE OF SHIPMENT)</b></p> <p><b><u>12</u> (QTY) DESICCANT BAGS HAVE BEEN DISPERSED INSIDE</b></p> <p><b>REMOVE ALL DESICCANT BAGS BEFORE COMMISSIONING AND OPERATION</b></p>

<b>⚠ CAUTION</b>
<p><b>CAUTION: Do not puncture desiccant bags. There are little or no health hazards associated with intact package of desiccant. However, health hazards do exist as a result of dusts generated if the container is cut, split or otherwise compromised. Breathing dust may irritate nose, throat or lungs. Dust can be irritating to eyes and skin.</b></p>



DT22527 – LABEL, PRESERVATION REV A