



Boiler Blowdown Water Recovery Unit

Catch it. Settle it. Re-use it. Fully contained rig boiler blowdown.



UNIT BD04 SHOWN

Skid-mounted unit that **catches rig boiler blowdown**, lets the **scale settle out**, and **pumps the clean, already-treated water back to the boiler feed**. No steam cloud, no ice field, no melt hole, no high-pH water on the ground.

2,200 lb
DRY WEIGHT

4' x 14' x 5'
W x L x H

2" / 2" / 4"
INLET · STEAM · CLEAN-OUT

110 V
TRANSFER PUMP

SPECIFICATIONS

GENERAL	
Application	Recovery of rig steam-boiler blowdown
Vessel	Horizontal steel tank, atmospheric (vented)
Venting	Top-mounted flash-steam vent stack
Scale handling	Settles in tank; removed via clean-out
DIMENSIONS & WEIGHT	
Overall (W x L x H)	4 ft x 14 ft x 5 ft (1.22 x 4.27 x 1.52 m)
Dry weight	2,200 lb (≈ 1,000 kg)
CONNECTIONS	
Blowdown inlet	2" blowdown line
Steam supply	2" rubber steam hose to coil
Clean-out	4" bolted clean-out
Return	Pump discharge to boiler feed
HEATING, PUMP & ELECTRICAL	
Freeze protection	Full-length steam coil
Transfer pump	110 V electric, in end enclosure; runs on rig power
HANDLING & SAFETY	
Skid	Oilfield skid with pipe runners & fork pockets
Transport	Skid or picker load; top lifting lugs
Signage	Boiler Blow Down & Hot Surface caution signs
Maintenance	Almost none; periodic scale clean-out

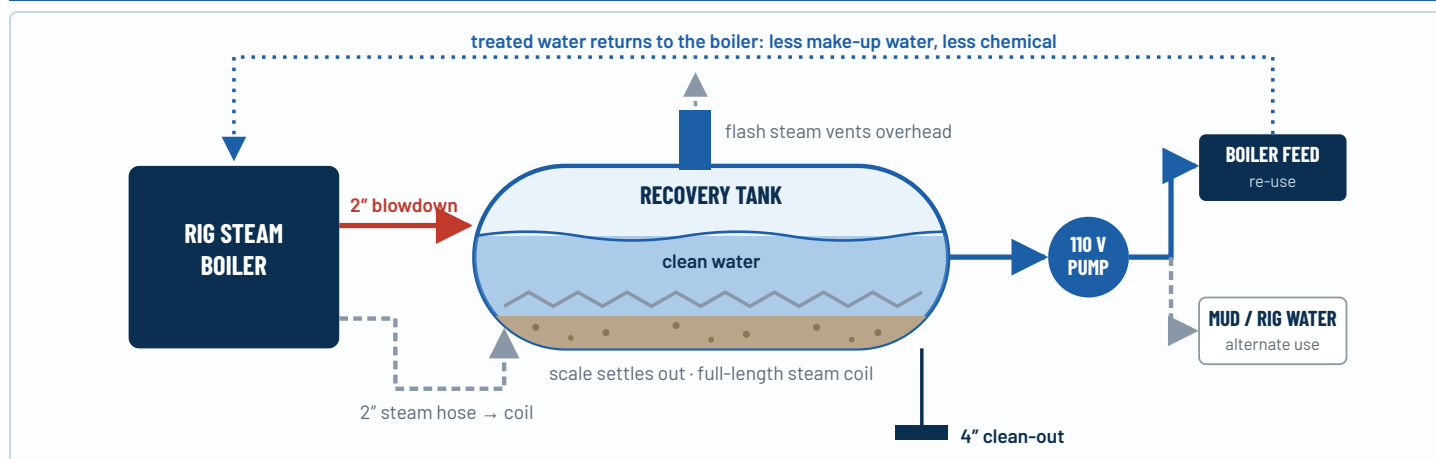
BENEFITS

- Water conservation; haul less water
- Boiler runs cleaner
- Less fluid disposal
- Less boiler chemical, since returned water is already treated
- Safety: no steam cloud, no ice field, no melt hole
- Environmental: no high-pH water on the ground
- Pays for itself
- Normally stays with the rig for the winter once rented

RIG-IN AT A GLANCE

- Set on skid or with a picker, even on rig matting
- Connect the 2" blowdown line
- Connect the 2" steam hose to the coil
- Plug the pump into 110 V rig power

HOW IT WORKS



- | | | | | |
|---|--|--|---|----------|
| Catch
Boiler blowdown goes through the 2" line into the tank instead of onto the lease. | 1 Vent & settle
Flash steam vents through the stack while scale drops to the bottom of the tank. | 2 Keep it liquid
The full-length steam coil, fed by a 2" steam hose, keeps the unit from freezing in winter. | 3 Re-use
The 110 V pump sends the already-treated water back to the boiler feed, or to mud and rig water. | 4 |
|---|--|--|---|----------|

WHY USE IT

Environmental

- Boiler blowdown ($\approx$ pH 12.5) is above the $\approx$ pH 9 allowance for release onto soil or the water table
- Total containment for zero-spill and sensitive drilling and servicing areas
- No pit or trench, so no land reclamation

Personnel Safety

- Nobody gets hit by hot water or steam
- No pits or trenches to step or fall into
- No frozen lines, drain valves or attachments

Water Management

- Supports fresh-water-use legislation
- Accurate blowdown volumes
- Recovered water goes back to the boiler, drilling mud or rig water

Lower Operating Cost

- Less soda ash and caustic, since active-pH boiler water is re-used
- Less water hauling and disposal trucking
- No pit or trench to dig and reclaim; no dilution or re-testing before disposal
- Tank can sit on top of the rig matting

REGULATORY NOTE: ALBERTA

pH 12.5

TYPICAL BOILER
BLOWDOWN

pH 9

GROUND-RELEASE
ALLOWANCE

< 50 °C

BEFORE ANY SURFACE
DISCHARGE

Surface release of boiler blowdown is not accepted as routine practice. Oilfield waste guidance (waste code BLBDWT) lists **re-use** or **disposal-well injection** as the normal routes. Surface discharge is allowed only when the water meets the discharge criteria and has been cooled below 50 °C.

Waste is regulated under AER Directive 058 (current edition effective June 4, 2026). Operators should confirm site-specific requirements.

RENTAL & RIG-IN

Delivery	Skid or picker load
Rig-in	2" blowdown line, 2" steam hose, 110 V power
Footprint	4 ft × 14 ft; can sit on rig matting
Season	Normally stays with the rig all winter
Service	Periodic scale clean-out through the 4" port
Fleet	BD series units

Specifications are nominal and may vary slightly by unit. Contact Burj Resources to confirm availability and unit details.