



# Decanter Centrifuge — Performance Evaluation Sheet

Complete during a normal run at steady feed. The verdict comes from the numbers, not from how the machine sounds.

Rig / unit: _____	Date: _____	Shift: <input type="checkbox"/> Day <input type="checkbox"/> Night	Inspector: _____
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## 1 - Unit & settings

Item	Value	Item	Value
Make / model	_____	Bowl diameter (in)	_____
Bowl speed (RPM)	_____	Differential (RPM)	_____
Pond / weir setting	_____	Duty	<input type="checkbox"/> Barite recovery <input type="checkbox"/> Fines / LGS

G-force:  $G \approx 1.42 \times 10^{-4} \times \text{RPM}^2 \times \text{bowl dia (in)} \rightarrow G = \text{_____}$

## 2 - Process readings (steady state)

Reading	Value	Reading	Value
Feed rate (gpm)	_____	Feed mud weight (ppg)	_____
Centrate (effluent) density (ppg)	_____	Torque / drive amps	_____
Cake condition	<input type="checkbox"/> Firm <input type="checkbox"/> Wet <input type="checkbox"/> Sloppy	Vibration / bearing temp	<input type="checkbox"/> Normal <input type="checkbox"/> Abnormal

## 3 - The verdict — three questions

Question	Evidence	Pass
Is it separating?	Centrate density must be measurably LIGHTER than feed. $\Delta = \text{___} \text{ ppg}$	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is it keeping up?	Run hours this 24 h = ___; active volume turned over = ___ times. Enough for the fines being generated?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is it stable?	Torque and cake steady across the shift (no creep, no wet slugs)?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Any "No" above = the unit is decoration, not solids control. Fixes: [sdrilltech.com/equipment/decanter-centrifuge.html](http://sdrilltech.com/equipment/decanter-centrifuge.html) /troubleshooting/