

Rig Solids-Control Audit — Field Checklist

A structured walk of the whole removal train, flowline to waste skip. Score each item: ✓ OK · X Action · N/A. This is the same sequence SC DrillTech uses on independent rig evaluations.

Rig / unit: _____	Date: _____	Shift: <input type="checkbox"/> Day <input type="checkbox"/> Night	Inspector: _____
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1 - Flowline & header box

✓	Check item	Finding / action
<input type="checkbox"/>	Flow distributes evenly to all shakers; no dead legs or overflow	
<input type="checkbox"/>	Gumbo/scalping provision adequate for the section being drilled	

2 - Shale shakers

✓	Check item	Finding / action
<input type="checkbox"/>	Screens: API numbers recorded; no tears, blinding or bypass; correct tension	
<input type="checkbox"/>	Coverage ~75–80% of deck; no flooding; bypass gate closed	
<input type="checkbox"/>	Condition: deck, rubbers, motors, springs — no defects carried over	

3 - Degasser

✓	Check item	Finding / action
<input type="checkbox"/>	On line whenever gas-cut mud is possible; vacuum/level correct	
<input type="checkbox"/>	Vent routed safely; downstream pumps protected from gas-cut feed	

4 - Desander / desilter / mud cleaner

✓	Check item	Finding / action
<input type="checkbox"/>	Feed head verified by gauge (≥ 75 ft; $h \approx 19.2 \times P \div MW$)	
<input type="checkbox"/>	Every apex: umbrella spray with air core — no roping, no dry cones	
<input type="checkbox"/>	Bank capacity 100–125% of circulating rate; correct cones fitted	
<input type="checkbox"/>	Mud cleaner screen (weighted mud): fine screen fitted, barite returning	

5 - Decanter centrifuge(s)

✓	Check item	Finding / action
<input type="checkbox"/>	Correct duty set (barite recovery vs fines/high-G); RPM & differential at spec	
<input type="checkbox"/>	Run hours match fines generation — unit not idle while LGS climbs	
<input type="checkbox"/>	Torque, cake and centrate logged each shift; no wet sloppy cake	

6 - Pits, agitation & transfer

✓	Check item	Finding / action
■	Agitators running in all active pits; no settled corners or dead zones	
■	Centrifugal pumps: no cavitation; correct feed to each cone bank	
■	Sand content at suction: trace only (<~0.5 vol%)	

7 - Waste circuit & compliance

✓	Check item	Finding / action
■	Discard density/volume logged daily (mass balance possible)	
■	Cuttings dryer (NADF): ROC/OOC on target — no glistening discard	
■	Skips, transfers and manifests match the permit basis	

8 - Data & KPIs

✓	Check item	Finding / action
■	Retort, MBT, PV/YP and sand content trended every tour	
■	Removal efficiency η and dilution factor calculated for the section	
■	Screen usage and centrifuge hours logged against footage	

Scoring guide: any X in sections 2, 4 or 5 usually shows up directly in dilution cost. For an independent, standards-referenced version of this audit — with a written report you can take to management — see scdrilltech.com (Services).