Appendix — Printable Worksheets

Book: Bitcoin Mining for Veterans (FM-BTC-01 Vol. I, Bitcoin Mining Field Series)
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Printable field worksheets — full-size letter edition. Worked examples dated to Hashrate Index (Luxor), 2026-09-08: hashprice ~$39.11/PH/day, BTC ~$78.9k, network ~935 EH/s. Free printable copies at cincodoggos.tech/resources.

How to Use These Worksheets

On submarines, we logged everything. These sheets are the same habit applied to mining. Each one covers a single job: checking a site, sizing a circuit, running a 48-hour burn-in, checking monthly profit against a live hashprice pull, and logging maintenance. Print them, fill them in with a pencil, and keep them in a binder or in the folder for each mining rig.

Use your own numbers: your power bill, your temperatures, your serial numbers. Where I show a worked example, it is teaching math tied to the 2026-09-08 Hashrate Index pull so you can see how the math runs. It is not what your machine will earn. Each sheet names the chapter it comes from if you want the full explanation. The book-wide caveat is in **Prologue: A Reality Check**, and I will not repeat it here.

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Worksheet	Use it when	Full explanation
1. Site Survey	Before you buy a mining rig for a home or small site	Chapter 14 — Heat, Noise, and the Home-Front Reality Check; Chapter 16 — Air, Immersion, and Hydro
2. Power and Breaker Load Sheet	Before anything is plugged in	Chapter 13 — Power Is the Battlefield
3. 48-Hour Burn-In Log	When a new or used mining rig arrives	Chapter 15 — Big Boy Mining Rigs
4. Monthly Profit Check	Once a month, with a fresh hashprice pull	Appendix — Profitability & Hashprice Field Manual
5. Maintenance Log	Every time you touch a machine, plus a monthly checklist	Chapter 17 — Maintenance, Repairs, and Hashboard Reality
6. Fleet Inventory (optional)	When you own more than one machine	Chapter 15 — Big Boy Mining Rigs; Chapter 17 — Maintenance, Repairs, and Hashboard Reality
7. Hosting Provider Comparison (optional)	When you are choosing a host	Chapter 18 — Hosting: Using Someone Else's Power and Facility

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WORKSHEET 1 — SITE SURVEY

Purpose: Confirm the space can handle the power, heat, noise, and access needs of a mining rig before you buy one. For air rigs in a garage, about 75°F ambient is a good target. That is a rule of thumb, not a rule for your site. See **Chapter 14 — Heat, Noise, and the Home-Front Reality Check** and **Chapter 16 — Air, Immersion, and Hydro**.

Site / room: _____ Date: _____ Surveyed by: _____

Location and space	Entry
Location (garage, shed, basement, other)	
Floor space available (L × W) and height	
Rack or shelf plan (how many machines, spacing)	
Clearance in front of intake / behind exhaust	

Ventilation — intake and exhaust path	Entry
Where cool intake air comes from	
Where hot exhaust leaves (window, vent, duct, door gap)	
Recirculation check: exhaust kept away from intake?	☐ Yes ☐ No ☐ Not sure
Duct / shroud / fan parts needed	

Sketch the path: intake → mining rig → exhaust → outside.

INTAKE → MINING RIG → EXHAUST → OUTSIDE (mark N / windows / doors)

Noise, temperature, internet, security	Entry
Noise: who hears it; reading or estimate	
Ambient temperature range: summer high / winter low	____ °F / ____ °F
Internet: wired Ethernet reachable?	☐ Wired ☐ Needs run Router/switch at:
Security: locked? who has access? visible from street?	

Landlord, HOA, zoning, and fire safety	Entry
Own or rent? Landlord approval (if renting)	☐ Own ☐ Rent: approval ☐ Yes ☐ No
HOA rules / local zoning or noise ordinance checked	☐ Yes ☐ N/A Notes:
Smoke detector; extinguisher rated for electrical fires	☐ Detector ☐ Extinguisher
Combustibles (boxes, rags, fuel) cleared from the machine area	☐ Yes

Go / No-Go: Power (Worksheet 2)	Heat exit	Noise	Internet	Permissions / fire
☐ Go ☐ No-Go	☐ Go ☐ No-Go	☐ Go ☐ No-Go	☐ Go ☐ No-Go	☐ Go ☐ No-Go

Overall: ☐ GO ☐ NO-GO ☐ Consider hosting (Worksheet 7) Open items: _____

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WORKSHEET 2 — POWER AND BREAKER LOAD SHEET

Purpose: Check every circuit against the continuous load of the mining rigs on it. A mining rig runs around the clock, so it is sized as continuous load. See **Chapter 13 — Power Is the Battlefield**.

Safety: Have a licensed electrician confirm the breaker, wire gauge, and receptacle for any circuit before a mining rig goes on it.

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FORMULA BOX
Amps drawn            = Watts ÷ Volts
Continuous limit      = Breaker rating (A) × 0.80
                        (continuous load no more than 80% of breaker rating)
Headroom              = Continuous limit − total amps drawn on that circuit
Energy per day (kWh)  = (Watts ÷ 1000) × 24
Power cost per day    = kWh per day × your $/kWh
Shared circuit        = add the amps of every mining rig on it before figuring headroom
```

Panel location: _____ Service size (A): _____ Your $/kWh: _____ Date: _____

Circuit table

Circuit / label	Breaker (A)	Volts (V)	80% limit (A)	Mining rig (model / name)	Rig watts	Amps drawn	Headroom (A)	Notes
EX	*30*	*240*	*24.0*	*S21 XP (worked example)*	*3,645*	*15.2*	*8.8*	*One rig per circuit*

Worked example — Antminer S21 XP on 240 V

My main air workhorse, hosted at CoreX. Bitmain's published spec for the S21 XP is 270 TH/s at 3,645 W on the wall, the same figures used in **Appendix — Profitability & Hashprice Field Manual**, Example A. **Recommended: host this class (Chapter 18); at home, one S21 XP-class rig per dedicated 30 A, 240 V circuit with nothing else on the breaker.** That keeps the rig well inside the 80% continuous-load limit.

Step	Math	Result
Rig watts (wall)	Bitmain published spec (same as Hashprice appendix, Example A)	3,645 W
Amps drawn at 240 V	3,645 ÷ 240	15.2 A
Recommended: 30 A breaker, one rig per circuit	30 × 0.80 = 24.0; 24.0 – 15.2	**24.0 A limit; 8.8 A headroom**
Not recommended: 20 A breaker	20 × 0.80 = 16.0; 16.0 – 15.2	Not recommended: only 0.8 A of margin
Two S21 XP on one 30 A circuit	15.2 × 2 = 30.4 A vs 24.0 A	Over the limit — one rig per circuit
Energy per day	(3,645 ÷ 1000) × 24	87.48 kWh/day

Rig input voltage range from the datasheet (your unit): _____ V Plug / receptacle type: _____

Electrician sign-off

Electrician name: _____ License #: _____ Date: _____

Circuits reviewed: _____ Signature: _____

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WORKSHEET 3 — 48-HOUR BURN-IN LOG

Purpose: Prove a new or used mining rig under real load before you close the deal or start trusting it. I run every machine for 48 hours and log it. See **Chapter 15 — Big Boy Mining Rigs** (Buy / Inspect / Burn-In).

Model: _____ Serial: _____ Seller / source: _____

Firmware (stock / other + version): _____ Pool / worker: _____ Circuit (Worksheet 2): _____

Expected hashrate (manufacturer, this config): _____ TH/s Start date / time: _____ Ambient at start: _____

Mark	Date / time	Hashrate (TH/s)	Chip temp	Board temp	Fan RPM	Rejected shares	Power draw (W)	Errors / notes
0 h								
1 h								
2 h								
4 h								
8 h								
12 h								
24 h								
36 h								
48 h								
Extra:								

Pass / Fail

Check (from Chapter 15 — Big Boy Mining Rigs)	Yes	No	Notes
UI identity (model, serial) matches what I bought	☐	☐	
Hashrate held in the expected band for this config	☐	☐	
Temperatures controllable in my ambient	☐	☐	
Rejected shares stable, no error storms in the logs	☐	☐	
Fans steady, no abnormal noise	☐	☐	
No abnormal cable or plug heat on a careful check	☐	☐	

Result: ☐ PASS — accept and add to Fleet Inventory ☐ FAIL — DOA / RMA / return ☐ Extend burn-in

Decision notes: _____

Signed: _____ Date / time closed: _____

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WORKSHEET 4 — MONTHLY PROFIT CHECK

Purpose: Once a month, run the same waterfall used in **Appendix — Profitability & Hashprice Field Manual**: gross, then pool fee and uptime, then power, then repair reserve, then net after costs. Pull hashprice fresh from hashrateindex.com and write the date on the sheet.

Month / year: _____ Mining rig or fleet: _____ Site: ☐ Home ☐ Hosted (host: _____)

DATE-LOCK inputs	Worked example (Example C)	This month
Pull date — hashrateindex.com	2026-09-08	
Hashprice ($/PH/day)	$39.11	
BTC price / network hashrate (dashboard)	~$78,880 / ~935 EH/s	
Hashrate (TH/s) — nameplate or measured (state which)	560 (nameplate class)	
Watts at the wall	7,300 (teaching)	
Power rate ($/kWh) — bill or host all-in	$0.06 (hosted, teaching)	
Pool fee (%)	1% (teaching)	
Uptime (%)	95% (teaching)	
Repair reserve (% of gross)	10% (teaching)	
Hosting fees not in the all-in rate ($/month)	$0	

#	Waterfall line	Math	Example C ($/day)	This month ($/day)
1	Power kWh per day	(Watts ÷ 1000) × 24	175.2 kWh	
2	Power cost	Line 1 × $/kWh	$10.51	
3	Gross hashprice sketch	(TH/s ÷ 1000) × hashprice	$21.90	
4	After pool fee + uptime	Line 3 × (1 – fee) × uptime	$20.60	
5	After power cost	Line 4 – Line 2	$10.09	
6	Hosting fees per day	$/month ÷ days in month	$0.00	
7	Repair reserve	10% × Line 3 (gross)	$2.19	
8	**Net per day, after costs**	Line 5 – Line 6 – Line 7	**$7.90**	
9	**Net per month**	Line 8 × days in month (30 in example)	**~$237**	

Lines 8 and 9 are the after-costs numbers; Lines 3–5 are building blocks. Example C is from the Profitability & Hashprice appendix (hosted hydro class, 2026-09-08 lock); Line 9 added at 30 days.

Pool check (optional): BTC paid _____ × BTC price _____ = $ _____ vs. Line 3 × days $ _____

Decision	When it fits
☐ KEEP	Net after costs is positive, or the mission is education and I accept the cost. Rig healthy.
☐ ADJUST	Net thin or negative. Check uptime and maintenance (Worksheet 5), power mode or firmware within warranty terms (Chapter 15), power rate, or hosting (Chapter 18). Re-run next month.
☐ SELL	Negative after adjustments for ____ months running, or a repair quote exceeds the value left in the machine (Chapter 17). Compare against simply buying bitcoin with the proceeds.

Action and date: _____

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WORKSHEET 5 — MAINTENANCE LOG

Purpose: Record every maintenance event and keep the recurring checks on schedule. If it changes the state of the machine, log it: dust-out, fan swap, thermal paste (small shelf miners only), firmware change, hashboard repair. See **Chapter 17 — Maintenance, Repairs, and Hashboard Reality**.

Date	Mining rig / serial	Action	Parts used	Downtime (h)	Result / notes
2026-09-08	*S21 XP-02*	*Fan check — rear rattle*	*1 fan (ordered)*	*0*	*Swap this week; stock FW*

Action codes (optional): D = dust-out · F = fan swap · TP = thermal paste (small miners) · FW = firmware · HB = hashboard repair / RMA · C = cable / connector

Recurring checklist — mark each month when done

Year: _____ Mining rig(s): _____

Task	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Daily UI checks logged (hash / temps / stales)												
Weekly plug, cable-heat, dust, fan-noise check												
Monthly dust-out (power off, unplug, wait 5 min, hold blades)												
Connectors reseated / wiring checked												
Firmware status checked and logged												
Spare fans counted (reorder if zero)												
Hosted units: host dashboard / ticket review												
Six-month: thermal paste, small shelf miners only												
Annual: fan replacement, deep clean, warranty review												

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WORKSHEET 6 — FLEET INVENTORY (OPTIONAL)

Purpose: One line per machine so serials, warranty dates, and firmware are on paper when you need them for an RMA, a host intake form, or a shipment. See **Chapter 15 — Big Boy Mining Rigs** and **Chapter 17 — Maintenance, Repairs, and Hashboard Reality**.

Rig label	Model	Serial	Purchase date	Price paid	Location or host	Warranty ends	Firmware	Burn-in passed
S21 XP-02	*Antminer S21 XP*	*(from sticker)*	*(date)*	*(receipt)*	*Hosted — CoreX*	*(date)*	*Stock*	☐
								☐
								☐
								☐
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Sample row is shaded; fill your own below it. Keep photos of each serial sticker with this sheet. Update the line after any firmware change or move to a host.

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WORKSHEET 7 — HOSTING PROVIDER COMPARISON (OPTIONAL)

Purpose: Put hosts side by side on the same questions before you sign or ship. My Whatsminer M73s hydro rigs are hosted at CoreX, which has been my preferred host. I asked these same questions first. See **Chapter 18 — Hosting: Using Someone Else's Power and Facility**.

Question	Host A:	Host B:	Host C:
Owns / runs the site?			
All-in rate ($/kWh), in writing			
Extra fees listed (setup, monitoring, other)			
Deposit and contract term			
Uptime history reviewed			
Curtailment terms and credits			
Models accepted (air / hydro)			
Monitoring software; firmware rules			
Repair process, costs, approval			
Pool and payout address stay under my control			
De-rack, return shipping, insurance			
Liens / security-interest language reviewed			
Exit / return process in writing			
Talked to a current customer			

Choice: _____ Reason: _____ Date: _____

Notes: _____

_____

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