



Verify

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AUDIT

POLAR · SMART CONTRACT & ECOSYSTEM REVIEW · 19/10/2026



1. TOKEN IDENTIFICATION

Name	PolarAI
Symbol	POLAR
Blockchain	Robinhood Chain mainnet (EVM, chain ID 4663)
Contract address	0x5108CDA97b40CEbe635A2031454c1524da9350b0
Standard / contract	ERC-20 · <i>PonsV2LauncherToken</i> (Pons V2 launchpad), source verified
Total supply	1.000.000.000 POLAR (fixed) · 18 decimals
Price (detected)	~\$0,000235
Market Cap / FDV (detected)	~\$235.000
Holders	225
Website / dApp	poldapp.polarberai.xyz
X / Twitter	@PolarBerAI
Main Pool	Uniswap V4: POLAR/ETH · liquidity ~\$43.900 · 24h volume ~\$570
Launch / TGE	Pool created 12/10/2026 · vesting TGE 12/10/2026 17:20 UTC

Sources: Robinhood Chain Blockscout (token, holders, verified source), DexScreener API (market data), direct RPC reads (publicnode). Snapshot: 19/10/2026.

2. Technical Smart Contract Audit

Review of the verified POLAR token source (*contracts/src/v2/PonsV2LauncherToken.sol*, solc 0.8.35, optimizer on, OpenZeppelin ERC20 + ERC20Burnable) to identify functions or permissions that could be used maliciously.

Check	Result	Details
Mint function (ability to create new tokens)	NOT PRESENT	<code>_mint</code> is called only once, in the constructor, sending the full 1B supply to the launch curve. No public mint exists: supply cannot be inflated.
Owner / admin role	NONE	The contract has no <code>Ownable/AccessControl</code> . <code>deployer</code> , <code>curve</code> and <code>launchFactory</code> are immutable informational addresses with no special rights.
Blacklist / freeze / pause	NOT PRESENT	No blacklist mapping, no pause, no transfer hook override: transfers cannot be blocked by anyone.
Transfer tax / hidden fees	NOT PRESENT	Standard OpenZeppelin <code>_update</code> ; no fee on buy, sell or transfer at token level.
Honeypot / sale block	NO RISK DETECTED	No code path restricts selling; regular buys and sells are observed in the V4 pool (10 buys / 10 sells in the last 24h).
Upgradeability (proxy)	NOT UPGRADEABLE	Plain contract, no proxy pattern: the code cannot be changed after deployment.
Burn	HOLDER ONLY	<code>burn/burnFrom</code> let a holder destroy only their own tokens (or approved allowance).
Metadata (logo, description, socials)	IMMUTABLE*	Set in the constructor, no setter. *The dApp still shows "Token CA: Not published yet" (see F-06).

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Methodology: manual review of the verified Solidity sources published on Blockscout, plus direct on-chain reads (state variables, Safe configuration, balances, bytecode comparison). The project's own inventory (*POLAR Smart Contracts Audit Inventory, 14/10/2026*) was used as the list of in-scope addresses. Unverified contracts were assessed only by on-chain state and bytecode, not by source.

3. Full Ecosystem Audit

3.1 Contract Inventory – Verification Status

Component	Address	Source	Note
POLAR token	0x5108...50b0	VERIFIED	PonsV2LauncherToken
Superstake vesting	0x57b0...349a	VERIFIED	SuperstakeVestingV4 · 33,53M POLAR
Ex-Bera – claim	0x0245...bb88	NOT VERIFIED	ExBeraVestingV4 · 21,18M POLAR · config locked
Ex-Bera – residual Treasury	0x52ed...c78e	VERIFIED	TreasuryVestingV4 · config locked
Weekly vault USDG / Lighter	0xc2ae...bc1d	VERIFIED	PolarWeeklyVault · empty, in activation
Fee → vault connector	0xa257...6dec	NOT VERIFIED	PolarFeeVaultConnector
Infrastructure waterfall	0xba99...3488	VERIFIED	PolarInfrastructureWaterfallV4
Multi-asset fee converter	0x659a...52b9	NOT VERIFIED	PolarMultiAssetFeeConverterV4
Adapter ETH → USDG	0x26a1...dd51	NOT VERIFIED	PolarV4NativeUsdGAdapter
Adapter weekly buyback	0xe96f...0ea9	NOT VERIFIED	PolarV4WeeklyBuybackAdapter
Team vesting ×5	see §3.3	1 of 5	Snow verified; other 4 bytecode-equivalent*
Angel vesting ×8	see §3.3	2 of 8	Angel 01/06 verified; other 6 bytecode-equivalent*
Safe / Treasury (3/4)	0x1385...6c72	STANDARD	Safe proxy v1.4.1

*Runtime bytecode of each unverified Team/Angel copy has the same length as its verified twin (6.316 / 9.722 hex chars) and differs in ≤106 characters, consistent with different immutable values only (beneficiary, allocation). Explorer verification is still recommended.

3.2 Governance – Safe Multisig

Address	0x13859BF7E964DDBA337ab072396fbc411e546C72
Version / threshold	Safe 1.4.1 · 3 of 4 signatures required
Modules / guard	None enabled · guard = 0x0 (matches manifest)
Signers	The 4 signers are the beneficiary wallets of the Team vesting for Snow, Funboy, Fedex, Cooper
POLAR held	332,25M (33,2% of supply)
Roles	Owner of every vesting contract · Angel milestone trigger · governance of the Weekly Vault

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3.3 Vesting Contracts (Team & Angel)

Team – TeamVestingV4 (5 contracts, 130M POLAR). Schedule is hard-coded in the contract: **15-day cliff + 90-day linear** vesting from TGE. Owner (the Safe) can only set the TGE date before `lockConfig()`; afterwards nothing can be changed. Only the beneficiary can withdraw; the owner cannot take back tokens; `renounceOwnership` is disabled. All contracts read `configLocked = true`, TGE 12/10/2026.

Beneficiary	Vesting contract	Allocation	Balance	Status
Fedex	0xe61b...a3e7	20M	20M	Locked, unclaimed
Funboy	0x8b43...cda5	20M	20M	Locked, unclaimed
Cooper	0xa160...c106	20M	20M	Locked, unclaimed
Andrea / Andy	0x3099...62f7	20M	20M	Locked, unclaimed
Snow	0x5ce2...8c30	50M	50M	Locked, unclaimed

Cliff ends 27/10/2026 · 100% of Team tokens unlocked by 25/01/2027.

Angel – AngelVestingV4 (8 contracts, 160M POLAR). Unlock in 6 cumulative milestones tied to market-cap thresholds, plus a **linear fallback** that releases any remaining amount between 25/01/2027 and 10/04/2027. Milestones are unlocked by the trigger address (the Safe) in order; the contract does **not** check the market cap on-chain (see F-02).

#	Market-cap threshold	Cumulative unlock	Status (on-chain)
1	\$100.000	10%	Triggered
2	\$200.000	20%	Triggered
3	\$400.000	35%	Triggered
4	\$1.000.000	55%	Pending
5	\$3.000.000	75%	Pending
6	\$10.000.000	100%	Pending

Observed: 6 of 8 Angel contracts already released 7M POLAR each (35%); Angel 03 and 04 hold the full 20M with 7M claimable. Remaining in Angel contracts: 118M.

3.4 Holder Distribution / Supply Map

225 holders. About **81%** of supply sits in project, vesting or protocol contracts:

Holder	POLAR	% Supply	Note
Safe / Treasury (3/4)	332,25M	33,23%	Team-signed multisig, liquid
Team vesting ×5	130,00M	13,00%	Locked, linear until 01/2027
Angel vesting ×8	118,00M	11,80%	Milestone / fallback until 04/2027
Uniswap V4 PoolManager	93,73M	9,37%	Market liquidity (not a holder)
PonsV2LaunchLocker	81,63M	8,16%	Launchpad lock contract
Superstake vesting	33,53M	3,35%	Community vesting
Ex-Bera claim	21,18M	2,12%	Migration claim
Largest external wallet	10,00M	1,00%	0x70a7...5303

Assessment: no external wallet holds more than 1% of supply, so the classic "insider dump" risk from unknown wallets is low. The real concentration is **governance-side**: the Safe controls 33,2% liquid supply and its four signers are also Team beneficiaries who will receive another 110M POLAR by 01/2027.

3.5 Liquidity

Pool	Uniswap V4 POLAR/ETH (PoolManager 0x8366...0951, hook 0xe5e7...e044)
Liquidity	~\$43.900 (≈93,6M POLAR + 9,15 ETH)
24h volume / trades	~\$570 · 20 transactions
LP lock	NOT VERIFIED – V4 positions are NFTs; lock status of the position was not confirmed

Absolute liquidity is low: orders of a few thousand dollars can move the price significantly (high slippage and volatility), independent of any malicious intent.

3.6 Fees, Vault and Trading Engine

Per the project's signed fee configuration, standard fees route 250/300 to the vault connector and 50/300 to the Safe through the waterfall contract; positive trading profit goes 1% to the USDG Treasury and 99% to POLAR buybacks (bought POLAR split 50% participants / 50% Treasury).

The **PolarWeeklyVault** (verified) is a season-based USDG vault that deposits funds to an **off-chain venue (Lighter)** through a keeper. Settlement requires all cash back in the vault and an EIP-712 attestation from a **riskSigner**; governance is the Safe. The vault currently holds no funds (season 2, open phase), so participant risk is not live yet, but depositors will rely on the keeper, the risk signer and the Lighter account while funds are off-chain.

4. FINDINGS

ID	Severity	Finding
F-01	MEDIUM	Governance concentrated in the team. The 3/4 Safe that holds 33,2% of supply, owns all vesting contracts, triggers Angel unlocks and governs the vault is signed only by four Team beneficiaries. No timelock. Recommend an independent signer and a public treasury policy.
F-02	MEDIUM	Angel milestones are not enforced on-chain. <code>unlockMilestone()</code> stores but never checks <code>mcThreshold</code> ; unlocks depend on the Safe's judgement. Milestone 3 (\$400k) is triggered while current market cap is ~\$235k; a historical peak above \$400k could not be confirmed with the sources consulted.
F-03	LOW	Short team vesting. 130M (13%) unlock linearly from 27/10/2026 to 25/01/2027, plus Angel fallback to 04/2027: meaningful sell-pressure overhang vs. ~\$44k liquidity.
F-04	LOW	Unverified sources. Ex-Bera claim, fee connector, fee converter, both V4 adapters and 10 vesting copies are not verified on Blockscout. Vesting copies match verified bytecode; the fee/adaptor contracts could not be reviewed.
F-05	INFO	Off-chain custody in the vault. Trust in keeper, risk signer and Lighter while funds are deployed. Not live yet.
F-06	INFO	Contract address not published on the dApp ("Token CA: Not published yet"). Users should confirm the address only via official channels.

5. RISK SUMMARY

Risk Area	Risk Level	Summary Rationale
Malicious token functions	Low	No mint, owner, blacklist, pause, tax or proxy; verified OpenZeppelin-based ERC-20
Governance / centralization	Medium	3/4 Safe signed only by team members controls 33,2% of supply and all vesting admin
Vesting & unlocks	Medium	Config locked and owner cannot reclaim tokens (positive); milestone unlocks rely on Safe; short team schedule
Holder concentration (external)	Low	No external wallet above 1% of supply
Liquidity / LP lock	Medium-High	~\$44k in a single V4 pool; LP lock not verified
Source transparency	Medium-Low	Core token and key vesting verified; fee/adaptor contracts not verified
Vault / trading engine	Not Evaluable	Not yet funded; depends on off-chain venue and keeper

Overall Judgment: The POLAR token contract itself is clean and immutable: it contains no function that would let the team mint, freeze, tax or block holders, and the vesting contracts are locked so the owner cannot take back allocations. The main risks are not in the code but in control and market structure: a team-only multisig holding a third of the supply and deciding Angel unlocks, upcoming team unlocks, and very thin liquidity. The profile is that of an early-stage, high-risk speculative asset with sound token code.

Consulted Sources

- Robinhood Chain Blockscout — token 0x5108CDA97b40CEbe635A2031454c1524da9350b0: verified source, holders, contract verification status (19/10/2026)
- Robinhood Chain RPC (publicnode) — direct reads: Safe owners/threshold/modules/guard, vesting state, Angel milestones, vault roles, bytecode
- DexScreener API — price, market cap, liquidity, volume of the Uniswap V4 POLAR/ETH pool
- POLAR Smart Contracts Audit Inventory, 14/10/2026 — list of in-scope contracts provided by the project
- poldapp.polarberai.xyz — official dApp (project description, published contract address status)

Disclaimer: This report is based on the verified source code and on-chain data available at the time of analysis (19/10/2026) and does not constitute financial, legal, or investment advice. Contracts listed as not verified were not reviewed at source level. On-chain states, balances and market data change continuously. Cryptocurrency markets are highly volatile and risky: always perform your own due diligence. Don't Trust, Werify.



LP custody verification

Robinhood Chain • Pons V2 • Evidence prepared 21 October 2026

Confirmed observation: the launch NFT is held by the permanent Pons locker. It has not been burned.

The POLAR launch position is NFT **#3,741,361**. At the observation block, both public RPC endpoints returned the same locker registration, NFT owner and nonzero liquidity. The position’s PoolKey identifies native ETH and the official POLAR token.

POLAR token
0x5108CDA97b40CEbe635A2031454c1524da9350b0
Permanent launch locker
0x267444D099b10fB5Ed7c3Cc7B7c767AdcA574952
Uniswap V4 PositionManager
0x58daec3116aae6d93017baaea7749052e8a04fa7

Check	Observed result
isLocked(POLAR)	true
lockedPositions(POLAR)	3,741,361
ownerOf(3,741,361)	Pons launch locker
getApproved(3,741,361)	Zero address
Safe / factory operator approvals	Both false
Position liquidity	29,277,002,188,455,995,389,594 units; nonzero

Observation: 21 October 2026, 07:04:45 UTC; block **94,093,661**. Same pinned latest block and hash rechecked across two public endpoints. Not represented as finalized state.

0x86f0a6ce4f3492afb72f2a6fc002e50e732c5ec30851b5c2f5ed53f150a6d6e6

LOCKER / SOURCE AND AUTHORITY

Why the administrator cannot withdraw

The conclusion concerns the exposed paths in the implementation matched to the observed locker runtime, not an unconditional guarantee against every external protocol failure.

The public source contains no NFT withdrawal, approval, arbitrary execution, rescue or liquidity-decrease method. Registration is factory-only and once-per-token; it checks that the locker already owns the NFT. Factory wiring is one-time and already populated. The locker is not identified as a proxy.

Ownable2Step gives an administrative owner, but ownership transfer does not supply an NFT-transfer or arbitrary-call path. The NFT is still owned by the contract, so **“permanently locked” is the accurate description; “LP tokens burned” is not.**

Reproducibility test	Result
Sourcify verification	creationMatch = match; runtimeMatch = match
Observed runtime	1,969 bytes; equals published on-chain bytecode
Executable comparison	Matches after declared immutable substitution and terminal metadata exclusion
Exact metadata match	No. Public compiler output 0.8.26; deployed metadata 0.8.35.
Independent solc run	Not performed; public compilation output was compared.

Observed locker runtime Keccak-256
0x58455f80b3773871d601a025e56ec27c71ab3bbb8e2ca6b17828954450742025

The locker also records **81,632,653.061224489768152159 POLAR** as separately locked ERC-20 supply. This balance is not the LP NFT and should not be counted as pool liquidity. The lock does not freeze market price or the amounts of ETH/POLAR that swaps move through the pool.

The POLAR-specific original graduation receipt was not recovered through the available public historical-log access. The current custody evidence above stands separately; no protocol locker deployment receipt is substituted for a POLAR lock event.

PUBLICATION / REPLAY

Suggested audit wording

For §3.5 Liquidity and the LP-lock component of the risk summary.

“The POLAR launch liquidity position is held by the Pons V2 permanent launch locker. NFT #3,741,361 is registered as locked and owned by that locker, with nonzero liquidity at block 94,093,661. The matched locker implementation exposes no withdrawal or arbitrary-call path. This is locked custody, not an NFT burn.”

Keep the remaining qualifications

Market depth, price impact, slippage, governance concentration and third-party Uniswap/launchpad/chain risks remain separate. Locking the position is not a price floor, a promise of fixed reserves or a blanket security certification. The proposed change resolves the evidence gap about the identified launch position, not the whole liquidity risk rating.

Primary evidence

E02_LP_PUBLIC_READS.json records the returned calls, block, addresses, decoded values and verification method. The source is publicly available from Sourcify; the evidence bundle includes a replay script and the complete audit-response context.

<https://sourcify.dev/server/v2/contract/4663/0x267444d099b10fb5ed7c3cc7b7c767adca574952?fields=all>

<https://robinhoodchain.blockscout.com/address/0x267444D099b10fB5Ed7c3Cc7B7c767AdcA574952>

<https://docs.ponsfamily.com/v2>

Replay without a wallet

```
python3 tools/verify_lp_readonly.py --output lp-recheck.json
```

Public endpoints used: <https://robinhood-rpc.publicnode.com> and <https://rpc.mainnet.chain.robinhood.com>. The script does not contain private keys or signing methods. Default latest-block reads are not called finalized. An archive-capable provider is required to repeat this check at a finalized historical block.

All observations in this note are read-only. No transfer, approval, pool modification or governance transaction was performed.