KISHIELD

Security Audit

Simba Token

April 28, 2023



Contract Audited

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Audit Summary

This report has been prepared for Simba Token on the BSC network. KISHIELD provides both client-centered and user-centered examination of the smart contracts and their current status when applicable. This report represents the security assessment made to find issues and vulnerabilities on the source code along with the current liquidity and token holder statistics of the protocol.

A comprehensive examination has been performed, utilizing Cross Referencing, Static Analysis, In-House Security Tools, and line-by-line Manual Review.

The auditing process pays special attention to the following considerations:

- Ensuring contract logic meets the specifications and intentions of the client without exposing the user's funds to risk.
- Testing the smart contracts against both common and uncommon attack vectors.
- Inspecting liquidity and holders statistics to inform the current status to both users and client when applicable.
- Assessing the codebase to ensure compliance with current best practices and industry standards.
- Verifying contract functions that allow trusted and/or untrusted actors to mint, lock, pause, and transfer assets.
- Thorough line-by-line manual review of the entire codebase by industry experts.





Project Overview

Token Summary

Parameter	Result
Address	0x087B95779B1B271844D1dbC989dde68432453f91
Name	Simba
Token Tracker	Simba (Simba)
Decimals	18
Supply	100,000,000,000
Platform	BSC
compiler	v0.8.7+commit.e28d00a7
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://bscscan.com/address/0x087B95779B1B271844D1dbC 989dde68432453f91#code
Url	https://www.simba.sale/

Main Contract Assessed

Name	Contract	Live
Simba	0x087B95779B1B271844D1dbC989dde68432453f91	Yes





Smart Contract Vulnerability Checks

Vulnerability	Automatic Scan	Manual Scan	Result
Unencrypted Private Data On-Chain	Complete	Complete	✓ Low / No Risk
Code With No Effects	Complete	Complete	✓ Low / No Risk
Message call with hardcoded gas amount	Complete	Complete	✓ Low / No Risk
Hash Collisions With Multiple Variable Length Arguments	Complete	Complete	✓ Low / No Risk
Unexpected Ether balance	Complete	Complete	✓ Low / No Risk
Presence of unused variables	Complete	Complete	Low
Right-To-Left-Override control character (U+202E)	Complete	Complete	⊘ Low / No Risk
Typographical Error	Complete	Complete	✓ Low / No Risk
DoS With Block Gas Limit	Complete	Complete	✓ Low / No Risk
Arbitrary Jump with Function Type Variable	Complete	Complete	✓ Low / No Risk
Insufficient Gas Griefing	Complete	Complete	✓ Low / No Risk
Incorrect Inheritance Order	Complete	Complete	✓ Low / No Risk
Write to Arbitrary Storage Location	Complete	Complete	✓ Low / No Risk
Requirement Violation	Complete	Complete	✓ Low / No Risk
Missing Protection against Signature Replay Attacks	Complete	Complete	✓ Low / No Risk
Weak Sources of Randomness from Chain Attributes	Complete	Complete	✓ Low / No Risk





Vulnerability	Automatic Scan	Manual Scan	Result
Authorization through tx.origin	Complete	Complete	✓ Low / No Risk
Delegatecall to Untrusted Callee	Complete	Complete	✓ Low / No Risk
Use of Deprecated Solidity Functions	Complete	Complete	✓ Low / No Risk
Assert Violation	Complete	Complete	✓ Low / No Risk
Reentrancy	Complete	Complete	✓ Low / No Risk
Unprotected SELFDESTRUCT Instruction	Complete	Complete	✓ Low / No Risk
Unprotected Ether Withdrawal	Complete	Complete	✓ Low / No Risk
Unchecked Call Return Value	Complete	Complete	✓ Low / No Risk
Outdated Compiler Version	Complete	Complete	✓ Low / No Risk
Integer Overflow and Underflow	Complete	Complete	✓ Low / No Risk
Function Default Visibility	Complete	Complete	✓ Low / No Risk

Contract Ownership

The contract ownership of Simba is not currently renounced. The ownership of the contract grants special powers to the protocol creators, making them the sole addresses that can call sensible ownable functions that may alter the state of the protocol.

The current owner is the address 0x7464Eea96E07EBE89B50Fd56e45B8B934AF4aE25 which can be viewed from:

HERE

The owner wallet has the power to call the functions displayed on the priviliged functions chart below, if the owner wallet is compromised this privileges could be exploited.

We recommend the team to renounce ownership at the right timing if possible, or gradually migrate to a timelock with governing functionalities in respect of transparency and safety considerations.





Important Notes To The Users:

- The owner cannot mint tokens after intial deployment.
- The owner cannot stop trading after it is enabled.
- The owner can blacklist addresses.
- Address excluded from fees can trade before the owner enables trading.
- Once the owner renounces ownership of the contract, none of the following are applicable.
- The owner can blacklist addresses using the setDeny function.
- The owner needs to enable trading.
- The owner can set the buy tax up to 25%
- The owner can set the sell tax up to 25%
- No high-risk Exploits/Vulnerabilities Were Found in token Source Code.

Read carefully the notes section and make your own decision before interacting with the audited contract.

Audit Passed







Technical Findings Summary

Classification of Issues

*All Issues Found are Informational

Severity	Description
High	Exploits, vulnerabilities or errors that will certainly or probabilistically lead towards loss of funds, control, or impairment of the contract and its functions. Issues under this classification are recommended to be fixed with utmost urgency
Medium	Bugs or issues with that may be subject to exploit, though their impact is somewhat limited. Issues under this classification are recommended to be fixed as soon as possible.
Low	Effects are minimal in isolation and do not pose a significant danger to the project or its users. Issues under this classification are recommended to be fixed nonetheless.
Info	Consistency, syntax or style best practices. Generally pose a negligible level of risk, if any.

Findings

Severity	Found
High	0
Medium	0
Low	0
Info	3
Total	3





Findings

Public function that could be declared external

ID	Severity	Contract	Details
01	Informational	Simba	Functions: DesignBuy, DesignSell, setDeny

Description

Gas Optimization. Public function that could be declared external

Recommendation

Public functions that are never called by the contract should be declared external to save gas.

Too many digits

ID	Severity	Contract	Details
02	Informational	Simba	Variable supply on constructor

Description

Literals with many digits are difficult to read and review.

Recommendation

Make use of scientific notation, use underscores, and/or use ether suffix.





Uninitialized local variables

ID	Severity	Contract	Details
03	Informational	Simba	functions _transfer, _tokenTransfer

Description

Variables takeFee, feeAmount, isSell

Recommendation

Initialize all the variables. If a variable is meant to be initialized to zero, explicitly set it to zero to improve code readability.





Priviliged Functions (onlyOwner & Others)

Function Name	Parameters	Visibility
renounceOwnership	none	public
transferOwnership	address newOwner	public
DesignBuy	uint256 newFundFee	public
DesignSell	uint256 newFundFee	public
swapTokenForFund	none	private
setFundAddress	address addr	external
Launch	none	external
setSwapPairList	address addr, bool enable	external
setDeny	address addr, bool status	public
setIsExcludeFromFee	address addr, bool enable	external





Statistics

Liquidity Info

Parameter	Result
Pair Address	0x380C812FCCC5A79cCaeC781b88472bC07feE50a7
Simba Reserves	0.00 Simba
BNB Reserves	0.00 BNB
Liquidity Value	\$0 USD

Token (Simba) Holders Info

Parameter	Result
Simba Percentage Burnt	0.00%
Simba Amount Burnt	0 Simba
Top 10 Percentage Own	100%
Top 10 Amount Owned	100,000,000,000 Simba
Top 10 Aprox Value	\$NaN USD





LP (Simba/BNB) Holders Info

Parameter	Result
Simba/BNB % Burnt	0.00%
Simba/BNB Amount Burnt	0 Simba/BNB
Top 10 Percentage Owned	0.00%
Top 10 Amount Owned	0 Simba/BNB
Locked Tokens Percentage	0.00%
Locked Tokens Amount	0 Simba/BNB

^{*} All the data diplayed above was taken on-chain at block 27757419







^{*} The tokens on industry-standard burn wallets are not included on the top 10 wallets calculations

Disclaimer

KISHIELD has conducted an independent audit to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the codes that were provided for the scope of this audit. This audit report does not constitute agreement, acceptance or advocation for the Project that was audited, and users relying on this audit report should not consider this as having any merit for financial advice in any shape, form or nature. The contracts audited do not account for any economic developments that may be pursued by the Project in question, and that the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are completely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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