

KISHIELD

Security Audit

IQBattleCar Token

April 21, 2022





Table of Contents

1 Audit Summary

2 Project Overview

2.1 Token Summary

2.2 Main Contract Assessed

3 Smart Contract Vulnerability Checks

4 Contract Ownership

4.1 Privileged Functions

5 Important Notes To The Users

6 Findings Summary

6.1 Classification of Issues

6.1 Findings Table

01 Unused Private Function

02 Public function that could be declared external

03 Assignment with no effects

7 Statistics

7.1 Liquidity

7.2 Token Holders

7.3 Liquidity Holders

8 Liquidity Ownership

9 Disclaimer



Audit Summary

This report has been prepared for IQBattleCar Token on the Binance Chain 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	0x9537b2368BCa0BF8662aadB125A3DD53c52dbFE1
Name	IQBattleCar
Token Tracker	IQBattleCar (IQB)
Decimals	18
Supply	100,000,000
Platform	Binance Chain
compiler	v0.8.7+commit.e28d00a7
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://bscscan.com/address/0x9537b2368BCa0BF8662aadB125A3DD53c52dbFE1#code
Url	https://www.iqgamesbattlecar.com/

Main Contract Assessed

Name	Contract	Live
IQBattleCar	0x9537b2368BCa0BF8662aadB125A3DD53c52dbFE1	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 / No Risk
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 IQBattleCar 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 0x03D31B679D30c3252ea16F1b2aFb54350A192d44 which can be viewed from:
[HERE](#)

The owner wallet has the power to call the functions displayed on the privileged 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 initial deployment.
- The owner cannot stop Trading.
- The owner cannot change the fees amount.
- Contract makes heavy use of assembly (Yul).
- Gas optimizations were not checked as they fall outside the scope of the audit.
- The contract uses an Authorized mechanism to allow users to perform special tasks, under this audit all these users are addressed as "Owner".
- Once the owner revokeAllPermissions for the Authorized addresses and himself, none of the following are applicable.
- The owner can activate/desactivate a tx limit (30,000 tokens)
- The owner can add/remove addresses from fees and tx limit.
- The owner can call buyBackAndHold and buyBackAndBurn.
- The owner can transfer any token out of the contract.
- The owner can withdraw BNB from the Authorized and SwapHelper contracts.
- No high-risk Exploits/Vulnerabilities Were Found in token Source Code.

Audit Passed



Findings Summary

Classification of Issues

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

Unused Private Function

ID	Severity	Contract	Function
01	Informational	IQBattleCar	functions walletHolder()

Description

These functions are private but never used by the contract logic.

Recommendation

We recommend deleting this function or setting the visibility to external if they are meant to be used.

Public function that could be declared external

ID	Severity	Contract	Function
02	Informational	IQBattleCar	Functions activeTxLimit, desactiveTxLimit, setExemptFee, setExemptFeeReceiver, setExemptTxLimit, setExemptStaker, setAdministrationWallet

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.

Assignment with no effects

ID	Severity	Contract	Function
03	● Informational	IQBattleCar	bool private _noReentrancy

Description

Bools variables in solidity are set to false by default.

Recommendation

We recommend deleting the initilization of the boolean variable to false

Privileged Functions (onlyOwner)

Function Name	Parameters	Visibility
activeTxLimit	none	public
desactiveTxLimit	none	public
setExemptFee	none	public
setExemptFeeReceiver	none	public
setExemptTxLimit	none	public
setExemptStaker	none	public
setAdministrationWallet	none	public
buyBackAndHold	none	external
buyBackAndHoldWithDecimals	none	public
buyBackAndBurn	none	external
buyBackAndBurnWithDecimals	none	public
safeOtherTokens	none	external

Statistics

Liquidity Info

Parameter	Result
Pair Address	0x56DA3CE84E24090Fe6D8caE308e30197DF01af37
IQB Reserves	0.00 IQB
BNB Reserves	0.00 BNB
Liquidity Value	\$0 USD

Token (IQB) Holders Info

Parameter	Result
IQB Percentage Burnt	0.00%
IQB Amount Burnt	0 IQB
Top 10 Percentage Own	100.00%
Top 10 Amount Owned	100,000,000 IQB
Top 10 Aprox Value	\$NaN USD

LP (IQB/BNB) Holders Info

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

* All the data displayed above was taken on-chain at block 17140869

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

Liquidity Ownership

The token does not have liquidity at the moment of the audit, block 17140869

KISHIELD



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 advocacy 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.

All information provided in this report does not constitute financial or investment advice, nor should it be used to signal that any persons reading this report should invest their funds without sufficient individual due diligence regardless of the findings presented in this report. Information is provided 'as is', and KISHIELD is under no covenant to the completeness, accuracy or solidity of the contracts audited. In no event will KISHIELD or its partners, employees, agents or parties related to the provision of this audit report be liable to any parties for, or lack thereof, decisions and/or actions with regards to the information provided in this audit report.

The assessment services provided by KISHIELD is subject to dependencies and under continuing development. You agree that your access and/or use, including but not limited to any services, reports, and materials, will be at your sole risk on an as-is, where-is, and as-available basis. Cryptographic tokens are emergent technologies and carry with them high levels of technical risk and uncertainty. The assessment reports could include false positives, false negatives, and other unpredictable results. The services may access, and depend upon, multiple layers of third-parties.