

**Blockchain Security - Smart Contract Audits** 

## **Security Assessment**

November 15, 2022



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#### **Disclaimer**

**ContractWolf.io** audits and reports should not be considered as a form of project's "advertisement" and does not cover any interaction and assessment from "project's contract" to "external contracts" such as Pancakeswap or similar.

ContractWolf does not provide any warranty on its released reports.

**ContractWolf** should not be used as a <u>decision</u> to invest into an audited project and is not affiliated nor partners to its audited contract projects.

ContractWolf provides transparent report to all its "clients" and to its "clients participants" and will not claim any guarantee of bug-free code within its SMART CONTRACT.

**ContractWolf** presence is to analyze, audit and assess the client's smart contract's code.

Each company or projects should be liable to its security flaws and functionalities.

## Scope of Work

**Quit Bitching Coalition's** team agreed and provided us with the files that needs to be tested (Github, Bscscan, Etherscan, files, etc.). The scope of the audit is the main contract.

The goal of this engagement was to identify if there is a possibility of security flaws in the implementation of the contract or system.

**ContractWolf** will be focusing on contract issues and functionalities along with the projects claims from smart contract to their website, whitepaper and repository which has been provided by **Quit Bitching Coalition**.

## **Description**

Our collection of 2929 Mavericks are taking over the Metaverse, with attitude. We are a 7 year apparel brand, using our expertise and customer base to bring major utilities to our holders.



#### **Risk Level Classification**

Risk Level represents the classification or the probability that a certain function or threat that can exploit vulnerability and have an impact within the system or contract.

Risk Level is computed based on CVSS Version 3.0

Level	Value	Vulnerability
Critical	9 - 10	An Exposure that can affect the contract functions in several events that can risk and disrupt the contract
High	7 - 8.9	An Exposure that can affect the outcome when using the contract that can serve as an opening in manipulating the contract in an unwanted manner
Medium	4 - 6.9	An opening that could affect the outcome in executing the contract in a specific situation
Low	0.1 - 3.9	An opening but doesn't have an impact on the functionality of the contract
Informational	0	An opening that consists of information's but will not risk or affect the contract

## **Auditing Approach**

Every line of code along with its functionalities will undergo manual review to check its security issues, quality, and contract scope of inheritance. The manual review will be done by our team that will document any issues that there were discovered.

## Methodology

The auditing process follows a routine series of steps:

- 1. Code review that includes the following:
  - Review of the specifications, sources, and instructions provided to ContractWolf to make sure we understand the size, scope, and functionality of the smart contract.
  - Manual review of code, our team will have a process of reading the code line-by-line with the intention of identifying potential vulnerabilities and security flaws.
- 2. Testing and automated analysis that includes:
  - Testing the smart contract functions with common test cases and scenarios, to ensure that it returns the expected results.
- 3. Best practices review, the team will review the contract with the aim to improve efficiency, effectiveness, clarifications, maintainability, security, and control within the smart contract.
- 4. Recommendations to help the project take steps to secure the smart contract.

# **Used Code from other Frameworks/Smart Contracts (Direct Imports)**

#### Imported Packages

- Address
- Context
- ERC165
- ERC721
- IERC165
- IERC721
- IERC721Metadata
- IERC721Receiver
- Ownable
- QBC
- Strings

## **Description**

Optimization enabled: No

Symbol: QBC

Max / Total Supply: 200

## **Capabilities**

#### **Components**

Ve	rsion	Contracts	Libraries	Interfaces	Abstract
1.0		2	2	4	3

#### **Exposed Functions**

Version	Public	Private	External	Internal
1.0	27	2	17	29

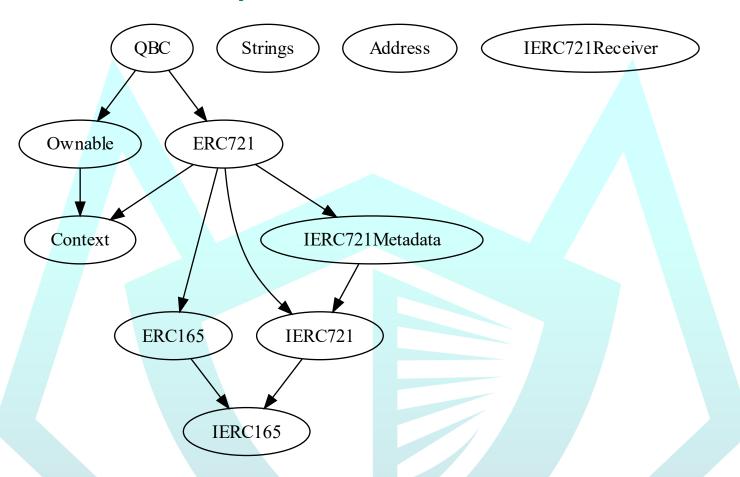
#### **State Variables**

Version	Total	Public
1.0	18	8

## **Capabilities**

Version	Solidity	Experimental	Can	Uses	Has
	Versions	Features	Receive	Assembly	Destroyable
	Observed		Funds		Contracts

## **Inheritance Graph**



## **Correct implementation of Token Standard**

Tested	Verified
✓	✓

## **Overall Checkup (Smart Contract Security)**

Tested	Verified
<b>√</b>	<b>√</b>

Function	Description	Exist	Tested	Verified
TotalSupply	Information about the total coin or token supply	<b>√</b>	<b>√</b>	<b>√</b>
BalanceOf	Details on the account balance from a specified address	<b>√</b>	<b>√</b>	<b>√</b>
Transfer	An action that transfers a specified amount of coin or token to a specified address	<b>√</b>	<b>√</b>	<b>√</b>
TransferFrom	An action that transfers a specified amount of coin or token from a specified address	<b>√</b>	<b>√</b>	✓
Approve	Provides permission to withdraw specified number of coin or token from a specified address	<b>√</b>	<b>✓</b>	<b>√</b>

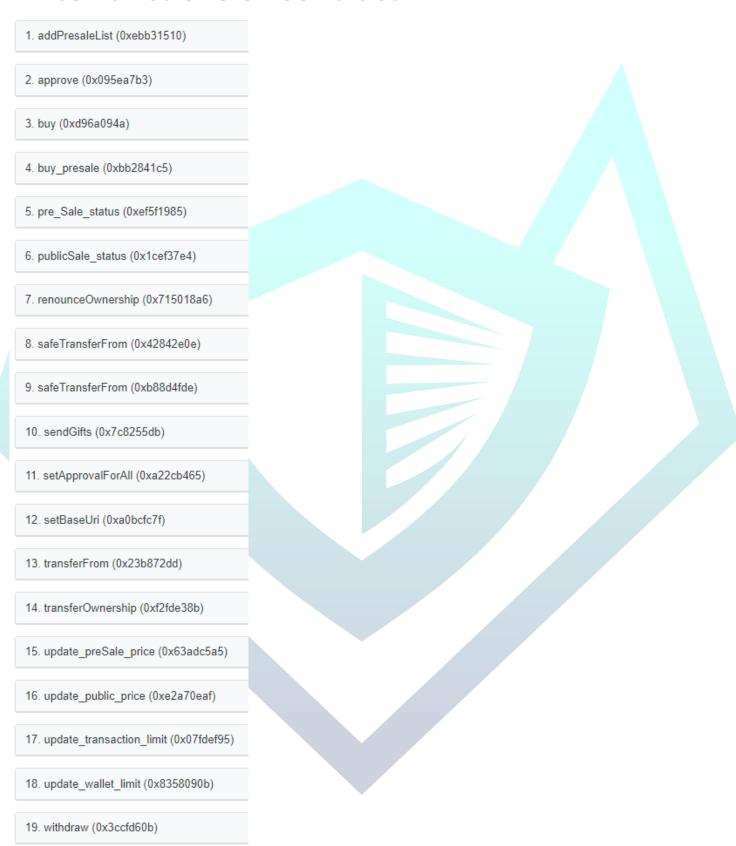
## **Verify Claims**

Statement	Exist	Tested	Deployer
Renounce Ownership	<b>√</b>	<b>✓</b>	<b>√</b>
Mint	<b>√</b>	<b>✓</b>	<b>✓</b>
Burn	<b>√</b>	<b>✓</b>	X
Block	_	_	_
Pause	_	_	_

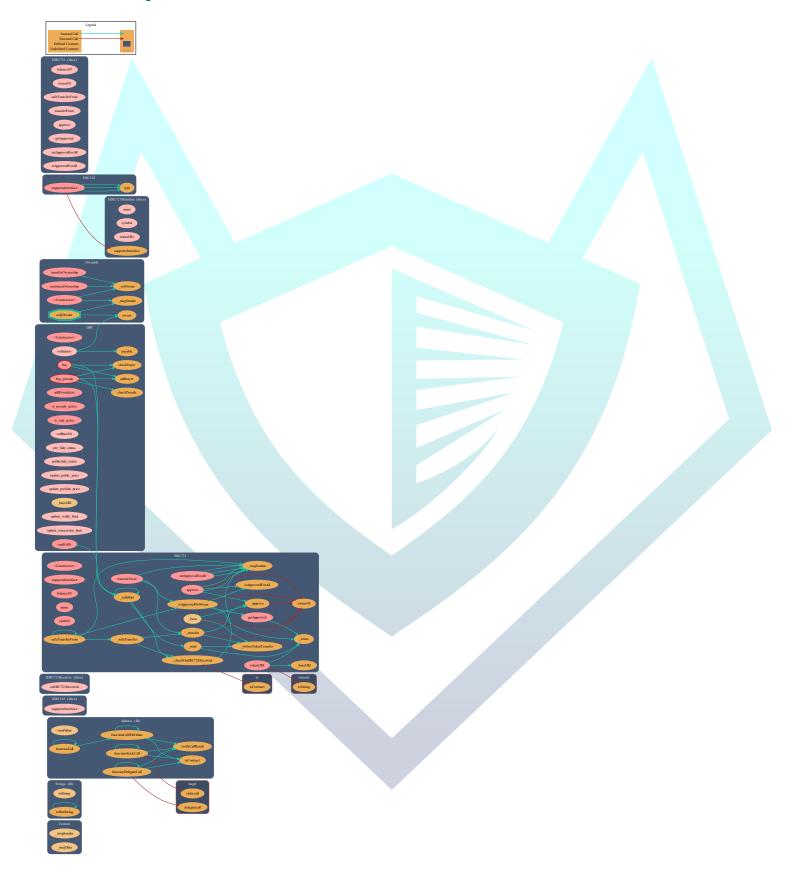
## Legend

Attribute	Symbol
Verified / Can	<b>✓</b>
Verified / Cannot	X
Unverified / Not checked	
Not Available	_

## **Write Functions of Contract**



## **Call Graph**



## **SWC Attacks**

ID	Title	Status
SWC-136	Unencrypted Private Data On-Chain	PASSED
<u>SWC-135</u>	Code With No Effects	PASSED
<u>SWC-134</u>	Message call with hardcoded gas amount	PASSED
<u>SWC-133</u>	Hash Collisions with Multiple Variable Length Arguments	PASSED
<u>SWC-132</u>	Unexpected Ether balance	PASSED
<u>SWC-131</u>	Presence of unused variables	PASSED
SWC-130	Right-To Left Override control character (U+202E)	PASSED
<u>SWC-129</u>	Typographical Error	PASSED
<u>SWC-128</u>	DoS With Block Gas Limit	PASSED
<u>SWC-127</u>	Arbitrary Jump with Function Type Variable	PASSED
SWC-126	Insufficient Gas Griefing	PASSED
SWC-125	Incorrect Inheritance Order	PASSED
<u>SWC-124</u>	Write to Arbitrary Storage Location	PASSED
<u>SWC-123</u>	Requirement Violation	PASSED
<u>SWC-122</u>	Lack of Proper Signature Verification	PASSED
<u>SWC-121</u>	Missing Protection against Signature Replay Attacks	PASSED
SWC-120	Weak Sources of Randomness from Chain Attributes	PASSED
<u>SWC-119</u>	Shadowing State Variables	PASSED
SWC-118	Incorrect Constructor Name	PASSED
<u>SWC-117</u>	Signature Malleability	PASSED
<u>SWC-116</u>	Block values as a proxy for time	PASSED
<u>SWC-115</u>	Authorization through tx.origin	PASSED
<u>SWC-114</u>	Transaction Order Dependence	PASSED
SWC-113	DoS with Failed Call	PASSED
<u>SWC-112</u>	Delegate call to Untrusted Callee	PASSED
<u>SWC-111</u>	Use of Deprecated Solidity Functions	PASSED

SWC-110	Assert Violation	PASSED
<u>SWC-109</u>	Uninitialized Storage Pointer	PASSED
<u>SWC-108</u>	State Variable Default Visibility	PASSED
<u>SWC-107</u>	Reentrancy	PASSED
<u>SWC-106</u>	Unprotected SELFDESTRUCT Instruction	PASSED
SWC-105	Unprotected Ether Withdrawal	PASSED
SWC-104	Unchecked Call Return Value	PASSED
SWC-103	Floating Pragma	LOW ISSUE
SWC-102	Outdated Compiler Version	PASSED
SWC-101	Integer Overflow and Underflow	PASSED
SWC-100	Function Default Visibility	PASSED

# **AUDIT PASSED**

#### **Low Issues**

A floating pragma is set (SWC-103)	L: 1011	

## **Function Comments**

#### **Description**

A floating pragma is set (SWC-103)

#### **Suggestion:**

Specific version to ensure that the bytecode produced does not vary between builds.

#### **Audit Comments**

- Owner can renounce ownership
- Owner can transfer ownership
- Owner can mint tokens via gift to addresses up to 2929 max supply
- Owner can set presale list address
- Owner can set base URI
- Owner can toggle presale status
- Owner can toggle public sale status
- Owner can set token price
- Owner can set presale price
- Owner can set wallet limit with an indefinite amount
- Owner can set max transaction limit with an indefinite amount
- Owner can collect tokens from contract
- Owner cannot burn
- Owner cannot block users
- Owner cannot pause contract



## CONTRACTWOLF

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