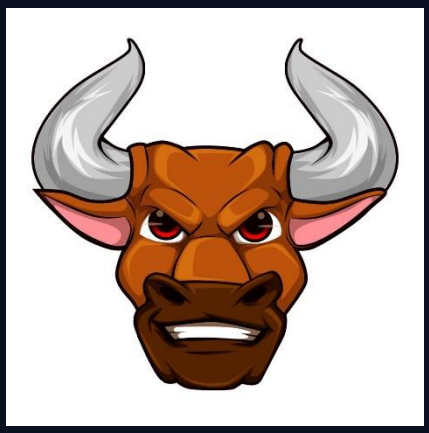
expelee

A Secure Place For Web3

SMART CONTRACT AUDIT OF

BULLS TOKEN



Contract Address

0xff0449A7d43ee8ACB10f8b1714CF59313b06654d

Audit Summary

Expelee team has performed a line-by-line manual analysis and automated review of the smart contract. The smart contract was analysed mainly for common smart contract vulnerabilities, exploits, and manipulation hacks. According to the smart contract audit:

Audit Result: **PASSED**

Ownership: **RENOUNCED**

KYC Verification: DONE

Audit Date: 18/08/2022

Audit Team: **EXPELEE**

Be aware that smart contracts deployed on the blockchain aren't resistant to internal exploit, external vulnerability, or hack. For a detailed understanding of risk severity, source code vulnerability, functional hack, and audit disclaimer, kindly refer to the audit.

DISCLAMER

All the content provided in this document is for general information only and should not be used as financial advice or a reason to buy any investment. Team provides no guarantees against the sale of team tokens or the removal of liquidity by the project audited in this document.

Always Do your own research and protect yourselves from being scammed. The Expelee team has audited this project for general information and only expresses their opinion based on similar projects and checks from popular diagnostic tools.

Under no circumstances did Expelee receive a payment to manipulate those results or change the awarding badge that we will be adding in our website. Always Do your own research and protect yourselves from scams.

This document should not be presented as a reason to buy or not buy any particular token. The Expelee team disclaims any liability for the resulting losses.

Contract Review

Contract Name	**Bulls Token**
Compiler Version	**v0.8.10+commit.fc410830**
Optimization	**No with 200 runs**
License	**MIT license**
Explorer	**https://bscscan.com/address/0xff0449A7d43ee8ACB10f8b1714CF59313b06654d#code**
Symbol	**BULLS**
Decimals	**18**
Total Supply	**10,000,000**
Domain	**https://bullsoverbears.io/**

Project Review

Token Name: BULLS

Web Site: https://bullsoverbears.io/

Twitter: https://twitter.com/_bullsoverbears

Telegram: https://t.me/bullsoverbears_chat

Contract Address:
0xff0449A7d43ee8ACB10f8b1714CF59313b06654d

Platform: Binance Smart Chain

Token Type: BEP 20

Language: SOLIDITY

Audit Methodology

The scope of this report is to audit the smart contract source code. We have scanned the contract and reviewed the project for common vulnerabilities, exploits, hacks, and back-doors. Below is the list of commonly known smart contract vulnerabilities, exploits, and hacks:

Category

Smart Contract Vulnerabilities	- Unhandled Exceptions - Transaction Order Dependency - Integer Overflow - Unrestricted Action - Incorrect Inheritance Order - Typographical Errors - Requirement Violation
Source Code Review	- Gas Limit and Loops - Deployment Consistency - Repository Consistency - Data Consistency - Token Supply Manipulation
Functional Assessment	- Operations Trail & Event Generation - Assets Manipulation - Liquidity Access

Vulnerability Checklist

№	Description.	Result
1	Compiler warnings.	Passed
2	Race conditions and Re-entrancy. Cross-function raceconditions.	Passed
3	Possible delays in data delivery.	Passed
4	Oracle calls.	Passed
5	Front running.	Passed
6	Timestamp dependence.	Passed
7	Integer Overflow and Underflow.	Passed
8	DoS with Revert.	Passed
9	DoS with block gas limit.	Passed
10	Methods execution permissions.	Passed
11	Economy model.	Passed
12	The impact of the exchange rate on the logic.	Passed
13	Private user data leaks.	Passed
14	Malicious Event log.	Passed
15	Scoping and Declarations.	Passed
16	Uninitialized storage pointers.	Passed
17	Arithmetic accuracy.	Passed
18	Design Logic.	Passed
19	Cross-function race conditions.	Passed
20	Safe Zeppelin module.	Passed
21	Fallback function security.	Passed

Manual Audit

- **Informational-Risk RISK LEVEL(0-2)**

2 informational risk code issues found

Low-Risk RISK LEVEL(2-4)

0 low-risk code issues found

Medium-Risk RISK LEVEL(4-7)

0 medium-risk code issues found

High-Risk RISK LEVEL(7-10)

0 high-risk code issues found

HONEYPOT DETECED!

Audit Summary

```
Compiled with solc
Number of lines: 637 (+ 0 in dependencies, + 0 in tests)
Number of assembly lines: 0
Number of contracts: 6 (+ 0 in dependencies, + 0 tests)

Number of optimization issues:
Number of informational issues: 2
Number of low issues: 0
Number of medium issues: 0
Number of high issues: 0

ERCs: ERC20

+------------+-------------+-------+--------------------+--------------+----------+
|    Name    | # functions |  ERCS |     ERC20 info     | Complex code | Features |
+------------+-------------+-------+--------------------+--------------+----------+
| BullsToken |      38     | ERC20 |     ∞ Minting      |      No      |          |
|            |             |       | Approve Race Cond. |              |          |
|            |             |       |                    |              |          |
+------------+-------------+-------+--------------------+--------------+----------+
```

○ INFORMATIONAL RISK

1) Conformance to Solidity naming conventions

Solidity defines a naming convention that should be followed.

```
function mint(address _receiver, uint256 _amount) external onlyOwner {
    _mint(_receiver, _amount);
    require(totalSupply() <= MAX_SUPPLY, "Above max supply");
```

Recommendation

Follow the solidity naming covention

2) Public Functions that could be declared externally

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

```
renounceOwnership() should be declared external:
    - Ownable.renounceOwnership() (bulls.sol#93-95)
transferOwnership(address) should be declared external:
    - Ownable.transferOwnership(address) (bulls.sol#101-104)
name() should be declared external:
    - ERC20.name() (bulls.sol#294-296)
symbol() should be declared external:
    - ERC20.symbol() (bulls.sol#302-304)
decimals() should be declared external:
    - ERC20.decimals() (bulls.sol#319-321)
balanceOf(address) should be declared external:
    - ERC20.balanceOf(address) (bulls.sol#333-335)
```

Recommendation

Use the external attribute for functions never called from the contract.

Important Points To Consider

Can Take Back Ownership	Not detected
Owner Change Balance	Not detected
Blacklist	Not detected
Modify Fees	Not detected
Proxy	Not detected
Whitelisted	Not detected
Anti Whale	Not detected
Trading Cooldown	Not detected
Transfer Pausable	Not detected
Cannot Sell All	Not detected
Hidden Owner	Not detected
Creator Address	0x9a7506aB6291bD2031E461DB4eb96C2476964B2F
Creator Balance	1,375,000 BULLS
Creator Percent	13.7500%
Owner Address	0x0000000000000000000000000000000000000000
Owner Balance	0 BULLS
Owner Percent	0%
Mint	**DETECTED**

About Expelee

Expelee is a community driven organisation dedicated to fostering an anti-rug movement. We're here to keep investment safe from fraudsters. We've encountered several rug pulls and know how it feels to be duped, which is why we don't want anybody else to go through the same experience. We are here to raise awareness through our services so that the future of cryptocurrency can be rug-free.

The auditing process focuses to the following considerations with collaboration of an expert team:

- Functionality test of the Smart Contract to determine if proper logic has been followed throughout the whole process.
- Manually detailed examination of the code line by line by experts.
- Live test by multiple clients using Test net.
- Analysing failure preparations to check how the Smart
- Contract performs in case of any bugs and vulnerabilities.
- Checking whether all the libraries used in the code are on the latest version.
- Analysing the security of the on-chain data.

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