

# Bog Inu Smart Contract Security Audit

#### Disclaimer

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

## Purpose

This document details ApeAudits' findings and recommended solutions. This audit was performed on June 12, 2021.

At the time of our audit, ownership of the contract had been renounced and 10.4 Uniswap LP tokens with an original value of 2.65 ETH + 40,933,505,459 BINU had been locked until July 11, 2021 at 23:48:49 GMT.

Token Name	Bog Inu	
Token Symbol	mbol BINU	
Contract Address	0x592433C49DA39659384Fe3Ad1C6907Cd2DeE9A84	
Etherscan Link	https://etherscan.io/address/0x592433c49da39659384fe3ad1c6907cd2dee9a84	
Liquidity Lock Transaction	https://etherscan.io/tx/0x41662fe3e22dfb6e3a570b92936af20e895a8fa1201576 69459d8b736f07d142	
Ownership Renounce Transaction	https://etherscan.io/tx/0x84f60397fe8d55beb2b13ddc1593de93caad4f2e89a015 77709732f5ccf44559	

## **Findings**

NO.	Audit Items	Audit Subclass	Audit Subclass Result
1	Overflow Audit	N/A	Passed
2	Race Conditions Audit	N/A	Passed
3	Authority Control Audit	Permission Vulnerability Audit Excessive Auditing Authority	Passed Passed
4	Safe Design Audit	Zeppelin Module Safe Compiler Version Hard-coded Version Fallback Function Safeuse Show Coding Security Function Return Value Security Call Function Security	Passed Passed Passed Passed Passed Passed Passed Passed Passed
5	Denial of Service Audit	N/A	Passed
6	Gas Optimization Audit	N/A	Passed
7	Design Logic Audit	N/A	Passed

8	Malicious Event Log Audit	N/A	Passed
9	"False Deposit" Vulnerability Audit	N/A	Passed
10	Uninitialized Storage Pointers Audit	N/A	Passed
11	Arithmetic Accuracy Deviation Audit	N/A	Passed

### BogInu.sol

#### **High Severity Issues**

None.

### Medium Severity Issues

- None.

### Low Severity Issues

- Issue:

Function unlock() can be used to reclaim ownership after contract has been renounced by calling in the following order: lock() -> renounceOwnership() -> unlock().

#### **Recommendation:**

Contract ownership was renounced properly and thus this is a non-issue for the contract in its current state.

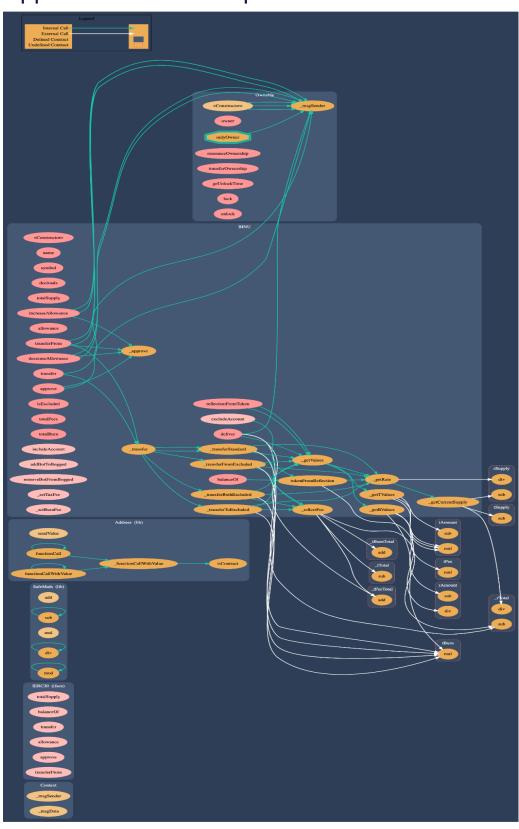
#### Conclusion

No issues found. Functions unlock() and renounceOwnership() have a bug that would allow ownership to be reclaimed, but it is impossible for the owner to exploit this because ownership has already been renounced.

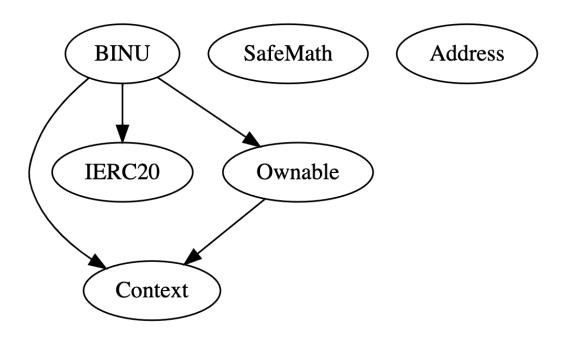
#### ApeAudits note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.

# Appendix A - Call Graph



# Appendix B - Inheritance Graph



### Appendix C - Function Information

- + Context
  - [Int] \_msgSender
  - [Int] \_msgData
- + [Int] IERC20
  - [Ext] totalSupply
  - [Ext] balanceOf
  - [Ext] transfer #
  - [Ext] allowance
  - [Ext] approve #
  - [Ext] transferFrom #
- + [Lib] SafeMath
  - [Int] add
  - [Int] sub
  - [Int] sub
  - [Int] mul
  - [Int] div
  - [Int] div
  - [Int] mod

  - [Int] mod
- + [Lib] Address
  - [Int] isContract
  - [Int] sendValue #
  - [Int] functionCall #
  - [Int] functionCall #
  - [Int] functionCallWithValue #
  - [Int] functionCallWithValue #
  - [Prv] \_functionCallWithValue #
- + Ownable (Context)
  - [Int] <Constructor> #
  - [Pub] owner
  - [Pub] renounceOwnership #
  - modifiers: onlyOwner
  - [Pub] transferOwnership #
  - modifiers: onlyOwner
  - [Pub] geUnlockTime
  - [Pub] lock #
  - modifiers: onlyOwner
  - [Pub] unlock #
- + BINU (Context, IERC20, Ownable)
  - [Pub] <Constructor>#
  - [Pub] name
  - [Pub] symbol
  - [Pub] decimals
  - [Pub] totalSupply
  - [Pub] balanceOf
  - [Pub] transfer #
  - [Pub] allowance

- [Pub] approve #
- [Pub] transferFrom #
- [Pub] increaseAllowance #
- [Pub] decreaseAllowance #
- [Pub] isExcluded
- [Pub] totalFees
- [Pub] totalBurn
- [Pub] deliver #
- [Pub] reflectionFromToken
- [Pub] tokenFromReflection
- [Ext] excludeAccount #
- modifiers: onlyOwner
- [Ext] includeAccount #
- modifiers: onlyOwner
- [Ext] addBotToBogged #
- modifiers: onlyOwner
- [Ext] removeBotFromBogged #
- modifiers: onlyOwner
- [Prv] \_approve #
- [Prv] \_transfer #
- [Prv] \_transferStandard #
- [Prv] \_transferToExcluded #
- [Prv] \_transferFromExcluded #
- [Prv] \_transferBothExcluded #
- [Prv] \_reflectFee #
- [Prv] \_getValues
- [Prv] \_getTValues
- [Prv] \_getRValues
- [Prv] \_getRate
- [Prv] \_getCurrentSupply [Ext] \_setTaxFee #
- modifiers: onlyOwner
- [Ext] \_setBurnFee #
- modifiers: onlyOwner

(\$) = payable function # = non-constant function