

**Building the Futuristic Blockchain Ecosystem** 

### SECURITY AUDIT REPORT





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# **OVERVIEW**

The 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
KYC Verification	-
Audit Date	19 April 2023



## PROJECT DESCRIPTION

### **BAKA INU**

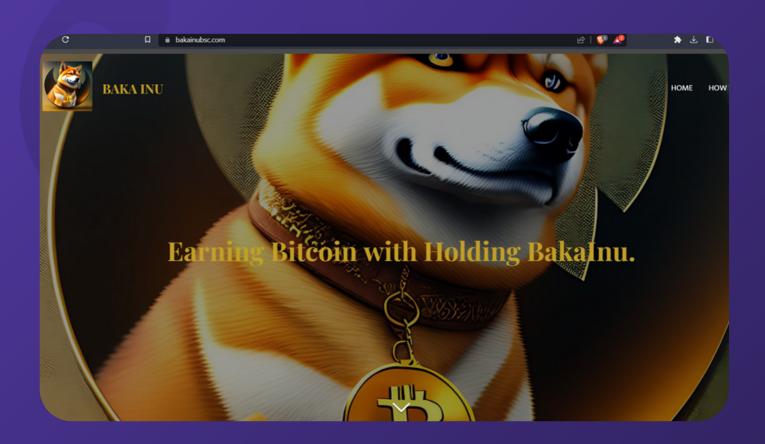
Introducing BAKAINU. This marks a new era! Earning \$BTC with Holding BakaInu. Yes, our distribution is BITCOIN! will be re-distributed! BSC best meme coin!





### SOCIAL MEDIA PROFILES

### **BAKA INU**







### **CONTRACT DETAILS**

Token Name: BAKA INU

Symbol: BAKI

**Network: Binance Smart Chain** 

Language: Solidity

Contract Address:

0xE1f3a9cc041181968e6f19acC0f00C4e908cA1B6

Total Supply: 1,000,000,000,000

Contract SHA-256 Checksum:

fcb3e3f6b69a4b2efc893eae59f2fa0b5730c2cb

**Owner's Wallet:** 

0xE704D8cC3f37F1dbdCeF692358AFB5074869e3BA

**Deployer's Wallet:** 

0xE704D8cC3f37F1dbdCeF692358AFB5074869e3BA

**Testnet:** 

https://testnet.bscscan.com/token/0x8bdAD51c893Bd4732

91aCD75cA748126c57D4c04



### **OWNER PRIVILEGES**

- owner is not able to change fees (10% for buy/sell/transfer)
- owner is not able to set limits for buy/sell/transfer amounts
- · owner is not able to blacklist an arbitrary wallet
- owner is not able to disable trades/transfers
- owner is not able to mint new tokens
- owner must enable trades manually



### AUDIT METHODOLOGY

#### **Audit Details**

Our comprehensive audit report provides a full overview of the audited system's architecture, smart contract codebase, and details on any vulnerabilities found within the system.

#### **Audit Goals**

The audit goal is to ensure that the project is built to protect investors and users, preventing potentially catastrophic vulnerabilities after launch, that lead to scams and rugpulls.

#### **Code Quality**

Our analysis includes both automatic tests and manual code analysis for the following aspects:

- Exploits
- Back-doors
- Vulnerability
- Accuracy
- Readability

#### **Tools**

- DE
- Open Zeppelin
- Code Analyzer
- Solidity Code
- Compiler
- Hardhat



# VULNERABILITY CHECKS

Design Logic	Passed
Compiler warnings	Passed
Private user data leaks	Passed
Timestamps dependence	Passed
Integer overflow and underflow	Passed
Race conditions & reentrancy. Cross-function race conditions	Passed
Possible delays in data delivery	Passed
Oracle calls	Passed
Front Running	Passed
DoS with Revert	Passed
DoS with block gas limit	Passed
Methods execution permissions	Passed
Economy model	Passed
Impact of the exchange rate on the logic	Passed
Malicious event log	Passed
Scoping and declarations	Passed
Uninitialized storage pointers	Passed
Arithmetic accuracy	Passed
Cross-function race conditions	Passed
Safe Zepplin module	Passed



### RISK CLASSIFICATION

When performing smart contract audits, our specialists look for known vulnerabilities as well as logical and acces control issues within the code. The exploitation of these issues by malicious actors may cause serious financial damage to projects that failed to get an audit in time. We categorize these vulnerabilities by the following levels:

#### **High Risk**

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

#### **Medium Risk**

Issues on this level are critical to the smart contract's performance/functionality and should be fixed before moving to a live environment.

#### **Low Risk**

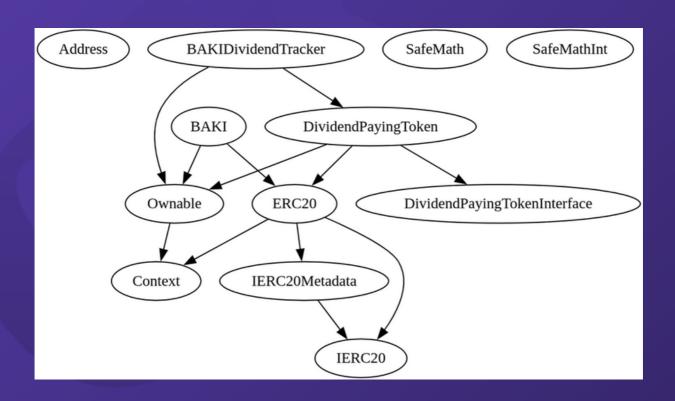
Issues on this level are minor details and warning that can remain unfixed.

#### **Informational**

Issues on this level are minor details and warning that can remain unfixed.



### **INHERITANCE TREES**







```
Contract
      **Function Name** | **Visibility** | **Mutability** | **Modifiers** |
**Address** | Library | |||
└ | sendValue | Internal 🔒 | 🛑 | |
**BAKI** | Implementation | ERC20, Ownable ||
└ | <Constructor> | Public | | ● | ERC20 |
| <Receive Ether> | External | | I | NO | |
| claim | External | | | NO | |
└ | withdrawToken | External | | ● | onlyOwner |
| withdrawETH | External | | | | onlyOwner |
L | excludeFromFees | Public | | | onlyOwner |
| excludeMultipleAccountsFromFees | Public | | | onlyOwner |
L | excludeFromDividends | External | | • | onlyOwner |
└ | setMarketingWallet | External | | ● | onlyOwner |
L | setSwapEnabled | External | | | | onlyOwner |
L | setAntiBotBlocks | External | | ● | onlyOwner |
L | setMinBalanceForDividends | External | | | | onlyOwner |
📙 setAutomatedMarketMakerPair | Private 🔐 | 🛑 | |
└ | setGasForProcessing | External | | ● | onlyOwner |
L | setClaimWait | External | | • | onlyOwner |
| getClaimWait | External | NO |
| getTotalDividendsDistributed | External | NO | |
isExcludedFromFees | Public | NO | |
| withdrawableDividendOf | Public | NO | |
| getCurrentRewardToken | External | NO | |
L | dividendTokenBalanceOf | Public | | NO |
| getAccountDividendsInfo | External | NO | |
| getAccountDividendsInfoAtIndex | External | NO | |
| getLastProcessedIndex | External | NO |
L | getNumberOfDividendTokenHolders | External | NO | |
L | _transfer | Internal 🔒 | 🛑 | |
L | swapAndLiquify | Private 🔐 | 🛑 | |
L | swapTokensForBNB | Private 🔐 | 🛑 | |
L | addLiquidity | Private 🔐 | 🛑 | |
**BAKIDividendTracker** | Implementation | Ownable, DividendPayingToken ||
└ | <Constructor> | Public | | ● | DividendPayingToken |
L | transfer | Internal 🔒 | | |
```



```
L | setMinBalanceForDividends | External | | | onlyOwner |
| excludeFromDividends | External | | | | onlyOwner |
| updateClaimWait | External | | | | onlyOwner |
| getLastProcessedIndex | External | NO | |
| getNumberOfTokenHolders | External | NO | |
| getCurrentRewardToken | External | NO |
| getAccount | Public | NO | |
getAccountAtIndex | Public | NO | |
L | canAutoClaim | Private 🔐 | | |
└ | setBalance | Public | | ● | onlyOwner |
| process | Public | | | NO | |
| processAccount | Public | | | onlyOwner |
**DividendPayingToken** | Implementation | ERC20, DividendPayingTokenInterface, Ownable ||
└ | <Receive Ether> | External | | ■ | NO | |
| distributeDividends | Public | | | NO | |
| withdrawDividendOfUser | Internal | | |
L | setRewardToken | External | | | onlyOwner |
💄 | swapBnbForCustomToken | Internal 🔒 | 🛑 | |
| dividendOf | Public | | NO | |
| withdrawableDividendOf | Public | NO | |
| withdrawnDividendOf | Public | NO |
| accumulativeDividendOf | Public | | NO | |
📙 transfer | Internal 🔒 | 🛑 | |
L | tokengeneration | Internal 🔒 | 🛑 | |
L | _burn | Internal 🔒 | 🛑 | |
📙 setBalance | Internal 🔒 | 🛑 | |
**ERC20** | Implementation | Context, IERC20, IERC20Metadata ||
└ | <Constructor> | Public | | ● | NO | |
L | name | Public | | NO | |
L | symbol | Public | | NO |
L | decimals | Public | | NO |
L | totalSupply | Public | | NO | |
L | balanceOf | Public | | NO | |
L | transfer | Public | | | NO | |
L | allowance | Public | | NO | |
| approve | Public | | | NO | |
L | transferFrom | Public | | | NO |
increaseAllowance | Public | | INO | |
L | decreaseAllowance | Public | | | NO | |
📙 transfer | Internal 🔒 | 🛑 | |
L | tokengeneration | Internal 🔒 | 🛑 | |
L | _burn | Internal 🔒 | 🛑 | |
L | approve | Internal 🔒 | 🛑
```



```
| L | beforeTokenTransfer | Internal 🔒 | 🛑 | |
| **IERC20** | Interface | ||
L | totalSupply | External | NO | |
 | balanceOf | External | NO | |
 L | transfer | External | | | NO | |
 | allowance | External | NO | |
 | approve | External | | | NO | |
 **IERC20Metadata** | Interface | IERC20 |||
 L | name | External | | NO | |
 L | symbol | External | | NO | |
 L | decimals | External | | NO | |
**Context** | Implementation | ||
L | _msgSender | Internal 🔒 | | |
L | msgData | Internal 🔒 | |
**SafeMath** | Library | ||
 L | add | Internal 🔒 | | |
 L | sub | Internal 🔒 | | |
 L | sub | Internal 🔒 | | |
 L | mul | Internal 🔒 | | |
 L | div | Internal 🔒 | | |
 L | div | Internal 🔒 | ||
 L | mod | Internal 🔒 | ||
 L | mod | Internal 🔒 | ||
**SafeMathInt** | Library | ||
 L | mul | Internal 🔒 | | |
 L | div | Internal 🔒 | ||
 L | sub | Internal 🔒 | | |
 L | add | Internal 🔒 | ||
 L | abs | Internal 🔒 | | |
 L | toUint256Safe | Internal 🔒 | | |
**SafeMathUint** | Library | ||
L | toInt256Safe | Internal 🔒 | | |
**DividendPayingTokenInterface** | Interface | ||
 L | dividendOf | External | | NO | |
 | distributeDividends | External | | | NO | |
 | withdrawableDividendOf | External | NO | |
 | withdrawnDividendOf | External | NO |
 L | accumulativeDividendOf | External | NO | |
```



```
**Ownable** | Implementation | Context |||
 └ | <Constructor> | Public | | ● | NO |
| L | owner | Public | | NO | |
 renounceOwnership | Public | onlyOwner |
 └ | transferOwnership | Public | | ● | onlyOwner |
**IPair** | Interface | ||
 └ | sync | External | | ● | NO | |
**IFactory** | Interface | ||
 └ | createPair | External | | ● |NO | |
 | getPair | External | NO | |
**IRouter** | Interface | ||
 L | factory | External | | NO | |
 | WETH | External | | NO | |
 | addLiquidityETH | External | | | NO | |
 □ | swapExactTokensForTokensSupportingFeeOnTransferTokens | External | | ● | NO | |
 | swapExactETHForTokens | External | | | NO |
 □ swapExactTokensForETHSupportingFeeOnTransferTokens | External | | ● NO | |
**IterableMapping** | Library | ||
 L | get | Internal 🔒 | | |
 L | getIndexOfKey | Internal 🔒 | | |
 L | getKeyAtIndex | Internal 🔒 | | |
 L | size | Internal 🔒 | | |
 L | set | Internal 🔒 | 🛑 | |
 L | remove | Internal 🔒 | 🛑 | |
```



### MANUAL REVIEW

#### **Severity Criteria**

Expelee assesses the severity of disclosed vulnerabilities according to methodology based on OWASP standarts.

Vulnerabilities are dividend into three primary risk categroies:

High

Medium

Low

High-level considerations for vulnerabilities span the following key areas when conducting assessments:

- Malicious input handling
- Escalation of privileges
- Arithmetic
- Gas use

Overall Risk Severity								
	HIGH	Medium	High	Critical				
Impact	MEDIUM	Low	Medium	High				
impact	LOW	Note	Low	Medium				
		LOW	MEDIUM	HIGH				
	Likelihood							



# **FINDINGS**

Findings	Severity	Found
High Risk	High	0
Medium Risk	Medium	0
Low Risk	Low	0
Suggestion & discussion	Informational	1
Gas Optimizations	● Gas Opt.	0



### **INFORMATIONAL RISK FINDING**

Owner must enable trades manually

#### **Severity: Informational**

#### **Overview**

The owner of the contract must enable trades for public, <u>otherwise</u> no one would be able to buy/sell/transfer their tokens except whitelisted wallets.

```
function enableTradingEnabled() external onlyOwner {
    require(!tradingEnabled, "Trading is already enabled");
tradingEnabled = true;
startTradingBlock = block.number;
}
```



### **ABOUT EXPELEE**

Expelee is a product-based aspirational Web3 start-up.
Coping up with numerous solutions for blockchain security and constructing a Web3 ecosystem from deal making platform to developer hosting open platform, while also developing our own commercial and sustainable blockchain.

### www.expelee.com

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**Building the Futuristic Blockchain Ecosystem** 



### **DISCLAIMER**

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 guarantess against the sale of team tokens or the removal of liquidity by the project audited in this document.

Always do your own research and project 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.

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