

# Advanced Manual Smart Contract Audit

September 7, 2023

- CoinsultAudits
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Audit requested by





# **Global Overview**

## **Manual Code Review**

In this audit report we will highlight the following issues:

| Vulnerability Level             | Total | Pending | Acknowledged | Resolved |
|---------------------------------|-------|---------|--------------|----------|
| <ul><li>Informational</li></ul> | 0     | 0       | 0            | 0        |
| Low-Risk                        | 1     | 1       | 0            | 0        |
| Medium-Risk                     | 0     | 0       | 0            | 0        |
| <ul><li>High-Risk</li></ul>     | 0     | 0       | 0            | 0        |



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# **Audit Summary**

| Project Name            | BABYDORKL                                  |
|-------------------------|--|
| Website                 | https://dorkl.baby/                        |
| Blockchain              | Binance Smart Chain                        |
| Smart Contract Language | Solidity                                   |
| Contract Address        | 0x6e42eb3fe7aa7b9d559ebcdb7fc6dc3adbfa703a |
| Audit Method            | Static Analysis, Manual Review             |
| Date of Audit           | 7 September 2023                           |

This audit report has been prepared by Coinsult's experts at the request of the client. In this audit, the results of the static analysis and the manual code review will be presented. The purpose of the audit is to see if the functions work as intended, and to identify potential security issues within the smart contract.

The information in this report should be used to understand the risks associated with the smart contract. This report can be used as a guide for the development team on how the contract could possibly be improved by remediating the issues that were identified.



## **Audit Scope**

Coinsult was comissioned by BABYDORKL to perform an audit based on the following code:

#### Not available

Note that we only audited the code available to us on this URL at the time of the audit. If the URL is not from any block explorer (main net), it may be subject to change. Always check the contract address on this audit report and compare it to the token you are doing research for.

#### **Audit Method**

Coinsult's manual smart contract audit is an extensive methodical examination and analysis of the smart contract's code that is used to interact with the blockchain. This process is conducted to discover errors, issues and security vulnerabilities in the code in order to suggest improvements and ways to fix them.

#### **Automated Vulnerability Check**

Coinsult uses software that checks for common vulnerability issues within smart contracts. We use automated tools that scan the contract for security vulnerabilities such as integer-overflow, integer-underflow, out-of-gas-situations, unchecked transfers, etc.

#### Manual Code Review

Coinsult's manual code review involves a human looking at source code, line by line, to find vulnerabilities. Manual code review helps to clarify the context of coding decisions. Automated tools are faster but they cannot take the developer's intentions and general business logic into consideration.

#### Used tools

- Slither: Solidity static analysis framework

- Remix: IDE Developer Tool

- CWE: Common Weakness Enumeration

- SWC: Smart Contract Weakness Classification and Test Cases

- DEX: Testnet Blockchains



## **Risk Classification**

Coinsult uses certain vulnerability levels, these indicate how bad a certain issue is. The higher the risk, the more strictly it is recommended to correct the error before using the contract.

| Vulnerability Level             | Description  |
|---------------------------------|--|
| <ul><li>Informational</li></ul> | Does not compromise the functionality of the contract in any way |
| Low-Risk                        | Won't cause any problems, but can be adjusted for improvement    |
| Medium-Risk                     | Will likely cause problems and it is recommended to adjust       |
| <ul><li>High-Risk</li></ul>     | Will definitely cause problems, this needs to be adjusted        |

Coinsult has four statuses that are used for each risk level. Below we explain them briefly.

| Risk Status  | Description  |
|--------------|--|
| Total        | Total amount of issues within this category              |
| Pending      | Risks that have yet to be addressed by the team          |
| Acknowledged | The team is aware of the risks but does not resolve them |
| Resolved     | The team has resolved and remedied the risk              |



# **SWC Attack Analysis**

The Smart Contract Weakness Classification Registry (SWC Registry) is an implementation of the weakness classification scheme proposed in EIP-1470. It is loosely aligned to the terminologies and structure used in the Common Weakness Enumeration (CWE) while overlaying a wide range of weakness variants that are specific to smart contracts.

| 10      |                                      |        |
|---------|--------------------------------------|--------|
| ID      | Description                          | Status |
| SWC-100 | Function Default Visibility          | Passed |
| SWC-101 | Integer Overflow and Underflow       | Passed |
| SWC-102 | Outdated Compiler Version            | Passed |
| SWC-103 | Floating Pragma                      | Passed |
| SWC-104 | Unchecked Call Return Value          | Passed |
| SWC-105 | Unprotected Ether Withdrawal         | Passed |
| SWC-106 | Unprotected SELFDESTRUCT Instruction | Passed |
| SWC-107 | Reentrancy                           | Passed |
| SWC-108 | State Variable Default Visibility    | Passed |
| SWC-109 | Uninitialized Storage Pointer        | Passed |
| SWC-110 | Assert Violation                     | Passed |
| SWC-111 | Use of Deprecated Solidity Functions | Passed |
| SWC-112 | Delegatecall to Untrusted Callee     | Passed |
| SWC-113 | DoS with Failed Call                 | Passed |
| SWC-114 | Transaction Order Dependence         | Passed |
| SWC-115 | Authorization through tx.origin      | Passed |



| SWC-116 | Block values as a proxy for time                        | Passed |
|---------|---|--------|
| SWC-117 | Signature Malleability                                  | Passed |
| SWC-118 | Incorrect Constructor Name                              | Passed |
| SWC-119 | Shadowing State Variables                               | Passed |
| SWC-120 | Weak Sources of Randomness from Chain Attributes        | Passed |
| SWC-121 | Missing Protection against Signature Replay Attacks     | Passed |
| SWC-122 | Lack of Proper Signature Verification                   | Passed |
| SWC-123 | Requirement Violation                                   | Passed |
| SWC-124 | Write to Arbitrary Storage Location                     | Passed |
| SWC-125 | Incorrect Inheritance Order                             | Passed |
| SWC-126 | Insufficient Gas Griefing                               | Passed |
| SWC-127 | Arbitrary Jump with Function Type Variable              | Passed |
| SWC-128 | DoS With Block Gas Limit                                | Passed |
| SWC-129 | Typographical Error                                     | Passed |
| SWC-130 | Right-To-Left-Override control character (U+202E)       | Passed |
| SWC-131 | Presence of unused variables                            | Passed |
| SWC-132 | Unexpected Ether balance                                | Passed |
| SWC-133 | Hash Collisions With Multiple Variable Length Arguments | Passed |
| SWC-134 | Message call with hardcoded gas amount                  | Passed |
| SWC-135 | Code With No Effects                                    | Passed |
| SWC-136 | Unencrypted Private Data On-Chain                       | Passed |
|         |   |        |



| Error Code | Description    |
|------------|----------------|
| CS: 016    | Initial Supply |

**Low-Risk:** Could be fixed, will not bring problems.

#### **Initial Supply**

When the contract is deployed, the contract deployer receives all of the initially created assets. Since the deployer and/or contract owner can distribute tokens without consulting the community, this could be a problem.

#### Recommendation

Private keys belonging to the employer and/or contract owner should be stored properly. The initial asset allocation procedure should involve consultation with the community.



## Other Owner Privileges Check

| Error Code | Description                         |
|------------|-------------------------------------|
| CEN-100    | Centralization: Operator Priviliges |

Coinsult lists all important contract methods which the owner can interact with.

✓ No other important owner privileges to mention.



# Notes

## Notes by BABYDORKL

No notes provided by the team.

## **Notes by Coinsult**

No notes provided by Coinsult



# **Contract Snapshot**

This is how the constructor of the contract looked at the time of auditing the smart contract.

Not available



## **Website Review**

Coinsult checks the website completely manually and looks for visual, technical and textual errors. We also look at the security, speed and accessibility of the website. In short, a complete check to see if the website meets the current standard of the web development industry.



| Type of check             | Description                                  |
|---------------------------|--|
| Mobile friendly?          | The website is mobile friendly               |
| Contains jQuery errors?   | The website does not contain jQuery errors   |
| Is SSL secured?           | The website is SSL secured                   |
| Contains spelling errors? | The website does not contain spelling errors |



# **Certificate of Proof**

Not KYC verified by Coinsult

# **BABYDORKL**

**Audited by Coinsult.net** 



Date: 7 September 2023

✓ Advanced Manual Smart Contract Audit



## Disclaimer

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Coinsult is not responsible if a project turns out to be a scam, rug-pull or honeypot. We only provide a detailed analysis for your own research.

Coinsult is not responsible for any financial losses. Nothing in this contract audit is financial advice, please do your own research.

The information provided in this audit is for informational purposes only and should not be considered investment advice. Coinsult does not endorse, recommend, support or suggest to invest in any project.

Coinsult can not be held responsible for when a project turns out to be a rug-pull, honeypot or scam.



# **Smart Contract Audit**

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