

Security Assessment

PAPPAPEPE

Verified on 06/06/2023



SUMMARY

| Project | | CHAIN | | METHODOLOG | Ϋ́ |
|---------------|-------------------|--------------|--------|--|--|
| PAPPAPEPE | | PAPPAPEPE | | Manual & Auton | natic Analysis |
| FILES | | DELIVERY | | TYPE | |
| Single | | 06/06/2023 | | Standard Audit | |
| | | | | | |
| | | | | | |
| | 2 | 0 0 | 0 | 0 | 2 |
| | Total Findings Cr | itical Major | Medium | Minor | Informational |
| | | | | | |
| | | | | | |
| 0 Critical | 0 Pending | | | An exposure that functions in sever disrupt the contra | can affect the contract ral events that can risk and act |
| 0 Major | 0 Pending | | | when using the c | can affect the outcome ontract that can serve as hipulating the contract in th |
| 0 Medium | 0 Pending | | | An opening that of executing the consituation | ould affect the outcome in a specific |
| 0 Minor | 0 Pending | | | An opening but do | pesn't have an impact on of the contract |
| 2 Information | al 2 Pending | | | An opening that o | consists information but ect the contract |
| STATUS | V AUDIT | PASSED | | | |



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DISCLAIMER PAPPAPEPE

<u>ContractWolf</u> audits and reports should not be considered as a form of project's "Advertisement" and does not cover any interaction and assessment from "Project Contract" to "External Contracts" such as PancakeSwap, UniSwap, SushiSwap or similar.

ContractWolf does not provide any <u>warranty</u> on its released report and should not be used as a <u>decision</u> to invest into audited projects.

ContractWolf provides a 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's presence is to analyze, audit and assess the Client's Smart Contract to find any underlying risk and to eliminate any logic and flow errors within its code.

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



SCOPE OF WORK PAPPAPEPE

PAPPAPEPE team has agreed and provided us with the files that need to be tested (*Github*, *BSCscan*, *Etherscan*, *Local files etc*). The scope of audit is the main contract.

The goal of this engagement is to identify if there is a possibility of security flaws in the implementation of smart contract and its systems.

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





AUDITING APPROACH PAPPAPEPE

Every line of code along with its functionalities will undergo manual review to check for security issues, quality of logic and contract scope of inheritance. The manual review will be done by our team that will document any issues that they 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, underlying and hidden security flaws.
- 2. Testing and automated analysis that includes:
- Testing the smart contract function with common test cases and scenarios to ensure that it returns the expected results.
- 3. Best practices and ethical 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 eliminate or minimize threats and secure the smart contract.



TOKEN DETAILS PAPPAPEPE



TPAPPA PEPE is the BIG DADDY in the Meme Coin Space! We are building and creating a fun and engaging community, whilst standing out in the growing world of meme crypto projects by giving usable, and, fun utility to PAPPA PEPE Token Holders.

| Token Name | Symbol | Decimal | Total Supply | Chain |
|------------|-----------|---------|--------------|-------|
| PAPPAPEPE | PAPPAPEPE | 18 | 777,777,777 | ETH |

SOURCE

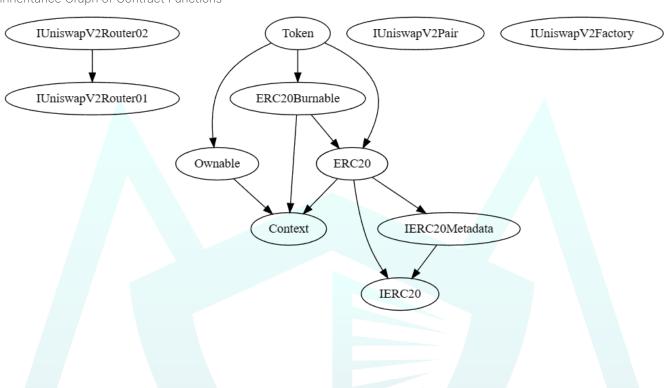
Source

0x3A77e405ddd1D7703058351BCf7FE22988B7fA97



INHERITANCE GRAPH PAPPAPEPE

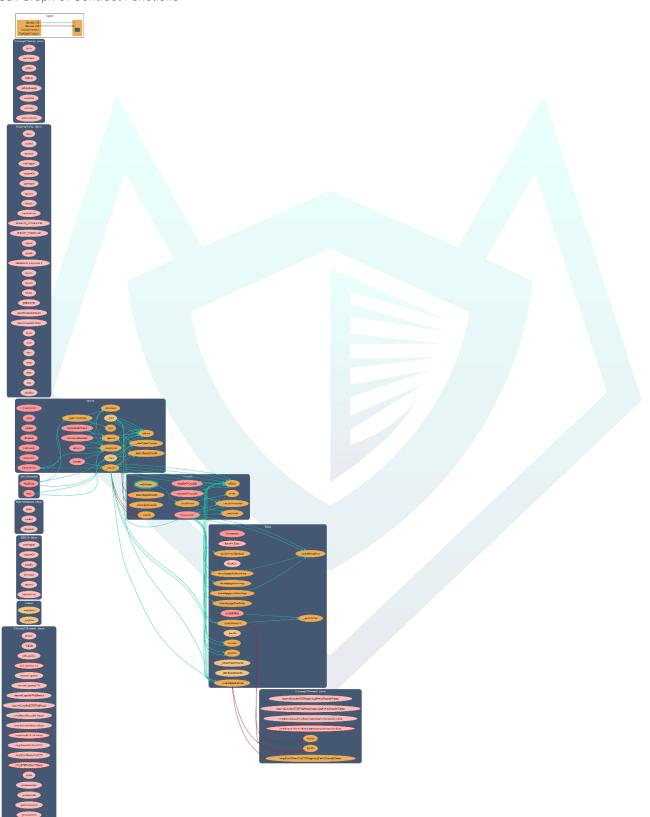
Inheritance Graph of Contract Functions





CALL GRAPH PAPPAPEPE

Call Graph of Contract Functions





FINDINGS PAPPAPEPE

| 2 | 0 | 0 | 0 | 0 | 2 |
|----------------|----------|-------|--------|-------|---------------|
| Total Findings | Critical | Major | Medium | Minor | Informational |

This report has been prepared to state the issues and vulnerabilities for PAPPAPEPE through this audit. The goal of this report findings is to identify specifically and fix any underlying issues and errors

| ID | Title | File & Line # | Severity | Status |
|--------|------------------------------|-------------------|---------------|---------------------------|
| CW-010 | Similar Variable Names | Token.sol | Informational | Pending |
| | Conditional boolean constant | Token.sol L: 1102 | Informational | Pending |



SWC ATTACKS PAPPAPEPE

Smart Contract Weakness Classification and Test Cases

| 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 SELF DESTRUCT 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 |



| ID | Description | Status |
|---------|--|----------------------------|
| 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 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 |



CW ASSESSMENT PAPPAPEPE

ContractWolf Vulnerability and Security Tests

| ID | Name | Description | Status |
|--------|--------------------------|--|----------|
| CW-001 | Multiple Version | Presence of multiple compiler version across all contracts | V |
| CW-002 | Incorrect Access Control | Additional checks for critical logic and flow | V |
| CW-003 | Payable Contract | A function to withdraw ether should exist otherwise the ether will be trapped | V |
| CW-004 | Custom Modifier | major recheck for custom modifier logic | V |
| CW-005 | Divide Before Multiply | Performing multiplication before division is generally better to avoid loss of precision | V |
| CW-006 | Multiple Calls | Functions with multiple internal calls | V |
| CW-007 | Deprecated Keywords | Use of deprecated functions/operators such as block.blockhash() for blockhash(), msg.gas for gasleft(), throw for revert(), sha3() for keccak256(), callcode() for delegatecall(), suicide() for selfdestruct(), constant for view or var for actual type name should be avoided to prevent unintended errors with newer compiler versions | V |
| CW-008 | Unused Contract | Presence of an unused, unimported or uncalled contract | V |
| CW-009 | Assembly Usage | Use of EVM assembly is error-prone and should be avoided or double-checked for correctness | V |
| CW-010 | Similar Variable Names | Variables with similar names could be confused for each other and therefore should be avoided | × |
| CW-011 | Commented Code | Removal of commented/unused code lines | V |
| CW-012 | SafeMath Override | SafeMath is no longer needed starting Solidity v0.8+. The compiler now has Built in overflow checking. | V |



FIXES & RECOMMENDATION

cw-010 Similar Names

Variables and functions with similar names could be confused for each other and therefore should be avoided

taxesethpappaAddressSetup
taxsethpappaAddressSetup

taxsethpappaFeesSetup taxesethpappaFeesSetup

function taxsethpappaAddressSetup
Function taxesethpappaAddressSetup

function taxsethpappaFeesSetup
Function taxesethpappaFeesSetup

Recommendation

Consider changing the variable and function with more precise naming regarding their use to avoid confusion and better readability



Conditional Boolean Constant

Using meaningful variables/constants instead of hard coding boolean values in logical conditions improves code readability, maintainability, and flexibility.

if (false || _taxsethpappaPending > 0 || _taxesethpappaPending > 0) {

Recommendation

Consider removing or defining descriptive boolean variables/constants to enhance code understanding and facilitate future modifications, promoting code maintainability.



AUDIT COMMENTS PAPPAPEPE

Smart Contract audit comment for a non-technical perspective

- Contract has public burn function
- Owner can renounce and transfer ownership
- Owner can exclude/include addresses from blacklist
- Owner can update swap threshold amount
- Owner can change fee receivers
- Owner can update total buy, total sell and total transfer fee up to 25% each
- Owner can exclude/include addresses from fees
- Owner can exclude/include addresses from automated market maker pair address
- Owner can burn tokens
- Owner cannot mint after initial deployment
- Owner cannot block users
- Owner cannot pause contract



CONTRACTWOLF

Blockchain Security - Smart Contract Audits