

Assure DeFi™

The Verification **Gold Standard**™



Security Assessment **WiseTools Token**

December 14, 2023

Audit Status: Fail

Audit Edition: Standard



ASSURE DEFI™
THE VERIFICATION **GOLD STANDARD**

Risk Analysis

Classifications of Manual Risk Results

Classification	Description
🔴 Critical	Danger or Potential Problems.
🟠 High	Be Careful or Fail test.
🟡 Low	Pass, Not-Detected or Safe Item.
🔵 Informational	Function Detected

Manual Code Review Risk Results

Contract Privilege	Description
🟢 Buy Tax	20%
🟢 Sale Tax	25%
🟢 Cannot Sale	Pass
🟢 Cannot Sale	Pass
🟡 Max Tax	25%
🟡 Modify Tax	Detected
🟢 Fee Check	Pass
🟢 Is Honeypot?	Not Detected
🟢 Trading Cooldown	Not Detected
🟡 Can Pause Trade?	Detected, Owner need to enable trade.
🟢 Pause Transfer?	Not Detected
🟡 Max Tx?	Detected
🟡 Is Anti Whale?	Detected
🟢 Is Anti Bot?	Not Detected

Contract Privilege	Description
● Is Blacklist?	Not Detected
● Blacklist Check	Pass
● is Whitelist?	Not Detected
● Can Mint?	Pass
● Is Proxy?	Not Detected
● Can Take Ownership?	Not detected
● Hidden Owner?	Not detected
● Owner	0x61865c3b7d6e5C5d0D50713e05b1958251A23f64
● Self Destruct?	Not Detected
● External Call?	Not detected
● Other?	Not detected
● Holders	2
● Auditor Confidence	Medium Risk
● KYC Present	Yes
● KYC URL	https://content.assureddefi.com/verification-package-content/wisetools

The following quick summary it's added to the project overview; however, there are more details about the audit and its results. Please read every detail.

Project Overview

Token Summary

Parameter	Result
Address	0x79783C22cF6dBA2d40d093154e80f70769CA46C7
Name	WiseTools
Token Tracker	WiseTools (WT)
Decimals	9
Supply	100,000,000
Platform	Ethereum
compiler	v0.8.19+commit.7dd6d404
Contract Name	WiseTools
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://etherscan.io/token/0x79783C22cF6dBA2d40d093154e80f70769CA46C7#code
Payment Tx	Corporate

Main Contract Assessed Contract Name

Name	Contract	Live
WiseTools	0x79783C22cF6dBA2d40d093154e80f70769CA46C7	Yes

TestNet Contract Assessed Contract Name

Name	Contract	Live
WiseTools	0xFDcbc0241fC068781eA6f0Bcd87bdcf3A89db105	Yes

Solidity Code Provided

Solid ID	File Sha-1	FileName
GROKGROW	175ccd21263d36d621cc868d75c28ee2a804ee53	wisetools.sol
GROKGROW		
GROKGROW		
GROKGROW		

Smart Contract Vulnerability Checks

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.

ID	Severity	Name	File	location
SWC-100	Pass	Function Default Visibility	wisetools.sol	L: 0 C: 0
SWC-101	Pass	Integer Overflow and Underflow.	wisetools.sol	L: 0 C: 0
SWC-102	Pass	Outdated Compiler Version file.	wisetools.sol	L: 0 C: 0
SWC-103	Pass	A floating pragma is set.	wisetools.sol	L: 0 C: 0
SWC-104	Pass	Unchecked Call Return Value.	wisetools.sol	L: 0 C: 0
SWC-105	Pass	Unprotected Ether Withdrawal.	wisetools.sol	L: 0 C: 0
SWC-106	Pass	Unprotected SELFDESTRUCT Instruction	wisetools.sol	L: 0 C: 0
SWC-107	Pass	Read of persistent state following external call.	wisetools.sol	L: 0 C: 0
SWC-108	Pass	State variable visibility is not set..	wisetools.sol	L: 0 C: 0
SWC-109	Pass	Uninitialized Storage Pointer.	wisetools.sol	L: 0 C: 0
SWC-110	Pass	Assert Violation.	wisetools.sol	L: 0 C: 0
SWC-111	Pass	Use of Deprecated Solidity Functions.	wisetools.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	wisetools.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	wisetools.sol	L: 0 C: 0
SWC-114	Pass	Transaction Order Dependence.	wisetools.sol	L: 0 C: 0

ID	Severity	Name	File	location
SWC-115	Pass	Authorization through tx.origin.	wisetools.sol	L: 0 C: 0
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	wisetools.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	wisetools.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	wisetools.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	wisetools.sol	L: 0 C: 0
SWC-120	Pass	Potential use of block.number as source of randomness.	wisetools.sol	L: 0 C: 0
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	wisetools.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	wisetools.sol	L: 0 C: 0
SWC-123	Pass	Requirement Violation.	wisetools.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	wisetools.sol	L: 0 C: 0
SWC-125	Pass	Incorrect Inheritance Order.	wisetools.sol	L: 0 C: 0
SWC-126	Pass	Insufficient Gas Griefing.	wisetools.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	wisetools.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	wisetools.sol	L: 0 C: 0
SWC-129	Pass	Typographical Error.	wisetools.sol	L: 0 C: 0
SWC-130	Pass	Right-To-Left-Override control character (U+202E).	wisetools.sol	L: 0 C: 0
SWC-131	Pass	Presence of unused variables.	wisetools.sol	L: 0 C: 0
SWC-132	Pass	Unexpected Ether balance.	wisetools.sol	L: 0 C: 0

ID	Severity	Name	File	location
SWC-133	Pass	Hash Collisions with Multiple Variable Length Arguments.	wisetools.sol	L: 0 C: 0
SWC-134	Pass	Message call with hardcoded gas amount.	wisetools.sol	L: 0 C: 0
SWC-135	Pass	Code With No Effects (Irrelevant/Dead Code).	wisetools.sol	L: 0 C: 0
SWC-136	Pass	Unencrypted Private Data On-Chain.	wisetools.sol	L: 0 C: 0

We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.

Inheritance

The contract for WiseTools has the following inheritance structure.

The Project has a Total Supply of 100,000,000



WT-03 | Lack of Input Validation.

Category	Severity	Location	Status
Volatile Code	 Low	wisetools.sol: L: 522 C: 14,L: 322 C: 14L: 342 C: 14,L: 354 C: 14	 Detected

Description

The given input is missing the check for the non-zero address.

The given input is missing the check for the missing required function.

Remediation

We advise the client to add the check for the passed-in values to prevent unexpected errors as below:

```
...  
require(receiver != address(0), "Receiver is the zero address");  
...  
...  
require(value X limitation, "Your not able to do this function");  
...
```

We also recommend customer to review the following function that is missing a required validation. missing required function.

WT-04 | Centralized Risk In addLiquidity.

Category	Severity	Location	Status
Coding Style	● High	wisetools.sol: L: 322 C: 14	█ Detected

Description

```
uniswapV2Router.addLiquidityETH{value: ethAmount}(address(this), tokenAmount, 0, 0, owner(), block.timestamp);
```

The addLiquidity function calls the uniswapV2Router.addLiquidityETH function with the to address specified as owner() for acquiring the generated LP tokens from the WT-WBNB pool.

As a result, over time the _owner address will accumulate a significant portion of LP tokens. If the _owner is an EOA (Externally Owned Account), mishandling of its private key can have devastating consequences to the project as a whole.

Remediation

We advise the to address of the uniswapV2Router.addLiquidityETH function call to be replaced by the contract itself, i.e. address(this) , and to restrict the management of the LP tokens within the scope of the contract's business logic. This will also protect the LP tokens from being stolen if the _owner account is compromised. In general, we strongly recommend centralized privileges or roles in the protocol to be improved via a decentralized mechanism or via smart-contract based accounts with enhanced security practices, f.e. Multisignature wallets.

1. Indicatively, here are some feasible solutions that would also mitigate the potential risk:
2. Time-lock with reasonable latency, i.e. 48 hours, for awareness on privileged operations;
3. Assignment of privileged roles to multi-signature wallets to prevent single point of failure due to the private key;

Introduction of a DAO / governance / voting module to increase transparency and user involvement

Project Action

liquidity is set to owner

WT-05 | Missing Event Emission.

Category	Severity	Location	Status
Volatile Code	 Low	wisetools.sol: L: 322 C: 14,L: 347 C: 14,L: 342 C: 14,L: 354 C: 14	 Detected

Description

Detected missing events for critical arithmetic parameters. There are functions that have no event emitted, so it is difficult to track off-chain changes. The linked code does not create an event for the transfer.

Remediation

Emit an event for critical parameter changes. It is recommended emitting events for the sensitive functions that are controlled by centralization roles.

WT-06 | Conformance with Solidity Naming Conventions.

Category	Severity	Location	Status
Coding Style	 Low	wisetools.sol: L: 361 C: 13	 Detected

Description

Solidity defines a naming convention that should be followed. Rule exceptions: Allow constant variable name/symbol/decimals to be lowercase. Allow _ at the beginning of the mixed_case match for private variables and unused parameters.

clearstuckETH

Remediation

Follow the Solidity naming convention.

<https://docs.soliditylang.org/en/v0.4.25/style-guide.html#naming-convention>

WT-13 | Extra Gas Cost For User.

Category	Severity	Location	Status
Logical Issue	 Informational	wisetools.sol: L: 275 C: 14	 Detected

Description

The user may trigger a tax distribution during the transfer process, which will cost a lot of gas and it is unfair to let a single user bear it.

Remediation

We advise the client to make the owner responsible for the gas costs of the tax distribution.

Project Action

WT-14 | Unnecessary Use Of SafeMath

Category	Severity	Location	Status
Logical Issue	 Low	wisetools.sol: L: 55 C: 9	 Detected

Description

The SafeMath library is used unnecessarily. With Solidity compiler versions 0.8.0 or newer, arithmetic operations

will automatically revert in case of integer overflow or underflow.
library SafeMath {
An implementation of SafeMath library is found.
using SafeMath for uint256;
SafeMath library is used for uint256 type in contract.

Remediation

We advise removing the usage of SafeMath library and using the built-in arithmetic operations provided by the Solidity programming language

Project Action

WT-18 | Stop Transactions by using Enable Trade.

Category	Severity	Location	Status
Logical Issue	● Critical	wisetools.sol: L: 354 C:14	■ Detected

Description

Enable Trade is present on the following contract and when combined with Exclude from fees it can be considered a whitelist process, this will allow anyone to trade before others and can represent and issue for the holders.

Remediation

We recommend the project owner to carefully review this function and avoid problems when performing both actions.

Project Action

Technical Findings Summary

Classification of Risk

Severity	Description
● Critical	Risks are those that impact the safe functioning of a platform and must be addressed before launch. Users should not invest in any project with outstanding critical risks.
● High	Risks can include centralization issues and logical errors. Under specific circumstances, these major risks can lead to loss of funds and/or control of the project.
● Medium	Risks may not pose a direct risk to users' funds, but they can affect the overall functioning of a platform
◆ Low	Risks can be any of the above but on a smaller scale. They generally do not compromise the overall integrity of the Project, but they may be less efficient than other solutions.
ℹ Informational	Errors are often recommended to improve the code's style or certain operations to fall within industry best practices. They usually do not affect the overall functioning of the code.

Findings

Severity	Found	Pending	Resolved
● Critical	1	1	0
● High	1	1	0
● Medium	1	1	0
◆ Low	3	3	0
ℹ Informational	1	1	0
Total	7	7	0

Social Media Checks

Social Media	URL	Result
Twitter	https://twitter.com/wisetoolsacc	Pass
Other	https://medium.com/@WISETOOLS	Pass
Website	https://WISETOOLS.IO	Pass
Telegram	https://t.me/Wisetools_Portal	Pass

We recommend to have 3 or more social media sources including a completed working websites.

Social Media Information Notes:

Auditor Notes: undefined

Project Owner Notes:



Assessment Results

Score Results

Review	Score
Overall Score	70/100
Auditor Score	65/100
Review by Section	Score
Manual Scan Score	11
SWC Scan Score	37
Advance Check Score	22

The Following Score System Has been Added to this page to help understand the value of the audit, the maximum score is 100, however to attain that value the project must pass and provide all the data needed for the assessment. Our Passing Score has been changed to 84 Points for a higher standard, if a project does not attain 85% is an automatic failure. Read our notes and final assessment below.

Audit Fail



Assessment Results

Important Notes:

- The following contract has a few items that could be improved.!
- The SafeMath is no longer recommended and to avoid the extra cost of gas for the user it should be prevented.!
- The contract liquidity goes to the owner, it's recommended that keys for the owner be secured.

Auditor Score =65
Audit Fail



Appendix

Finding Categories

Centralization / Privilege

Centralization / Privilege findings refer to either feature logic or implementation of components that act against the nature of decentralization, such as explicit ownership or specialized access roles in combination with a mechanism to relocate funds.

Gas Optimization

Gas Optimization findings do not affect the functionality of the code but generate different, more optimal EVM opcodes resulting in a reduction on the total gas cost of a transaction.

Logical Issue

Logical Issue findings detail a fault in the logic of the linked code, such as an incorrect notion on how `block.timestamp` works.

Control Flow

Control Flow findings concern the access control imposed on functions, such as owner-only functions being invoke-able by anyone under certain circumstances.

Volatile Code

Volatile Code findings refer to segments of code that behave unexpectedly on certain edge cases that may result in a vulnerability.

Coding Style

Coding Style findings usually do not affect the generated byte-code but rather comment on how to make the codebase more legible and, as a result, easily maintainable.

Inconsistency

Inconsistency findings refer to functions that should seemingly behave similarly yet contain different code, such as a constructor assignment imposing different require statements on the input variables than a setter function.

Coding Best Practices

ERC 20 Coding Standards are a set of rules that each developer should follow to ensure the code meets a set of criteria and is readable by all the developers.

Disclaimer

Assure Defi has conducted an independent security assessment to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the reviewed code for the scope of this assessment. This report does not constitute agreement, acceptance, or advocacy for the Project, and users relying on this report should not consider this as having any merit for financial advice in any shape, form, or nature. The contracts audited do not account for any economic developments that the Project in question may pursue, and the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude, and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are entirely free of exploits, bugs, vulnerabilities or depreciation of technologies.

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