

CFG NINJA AUDITS

Security Assessment

MemeFarmer Token

November 24, 2023

Audit Status: Pass

Audit Edition: Advance



3LADE POOL



Risk Analysis

Classifications of Manual Risk Results

Classification	Description
Critical	Danger or Potential Problems.
Major	Be Careful or Fail test.
Minor	Pass, Not-Detected or Safe Item.
Informational	Function Detected

Manual Code Review Risk Results

Contract Priviledge	Description
Buy Tax	5
Sale Tax	5
Cannot Buy	Pass
Cannot Sale	Pass
Max Tax	5
Modify Tax	Not-Detected
Fee Check	Pass
Is Honeypot?	Not detected
Trading Cooldown	Not Detected
Can Pause Trade?	Fail
Pause Transfer?	Detected, Owner needs to enable trade.





Contract Priviledge	Description
Max Tx?	Pass
Is Anti Whale?	Not Detected
Is Anti Bot?	Not Detected
Is Blacklist?	Not Detected
Blacklist Check	Pass
is Whitelist?	Detected
Can Mint?	Pass
Is Proxy?	Not Detected
Can Take Ownership?	Not detected
Hidden Owner?	Not detected
Owner	0xa29128EB9540071C54DC7C6975cAEbD6e5A4A7fC
Self Destruct?	Not Detected
① Other?	Not detected
Other?	Not detected
Holders	1
Auditor Confidence	High

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	0x3cf704Ad80f6910fb14348569cE1273626394A2f
Name	MemeFarmer
Token Tracker	MemeFarmer (MemeF)
Decimals	18
Supply	21,000,000
Platform	Binance Smart Chain
compiler	v0.8.19+commit.7dd6d404
Contract Name	MemeFarmer
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	https://bscscan.com/address/0x3cf704Ad80f6910fb14348569 cE1273626394A2f#code
Payment Tx	0xb78d7397c263e431fdd51d27d6ea9fd390a6a99b9232106d7 c22fe242cdc4ae7





Main Contract Assessed Contract Name

Name	Contract	Live
MemeFarmer	0x3cf704Ad80f6910fb14348569cE1273626394A2f	Yes

TestNet Contract Assessed Contract Name

Name	Contract	Live
MemeFarmer	0x2d3760c365093a5D318Ff8a72b055176F37f22d5	Yes

Solidity Code Provided

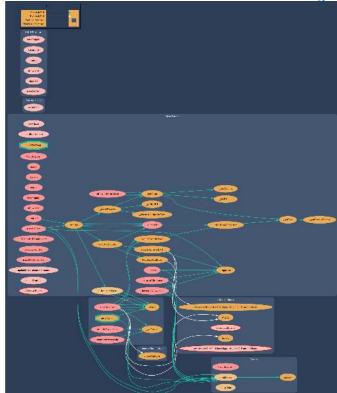
SollD	File Sha-1	FileName
MemeFarmer	f281c3c8a7977ab05443e2b9938cd98fc5e6bd2e	MemeFarmer.sol
MemeFarmer		
MemeFarmer		
MemeFarmer		





Call Graph

The contract for MemeFarmer has the following call graph structure.







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	MemeFarmer.sol	L: 0 C: 0
SWC-101	Pass	Integer Overflow and Underflow.	MemeFarmer.sol	L: 0 C: 0
SWC-102	Pass	Outdated Compiler Version file.	MemeFarmer.sol	L: 0 C: 0
SWC-103	Pass	A floating pragma is set.	MemeFarmer.sol	L: 0 C: 0
SWC-104	Pass	Unchecked Call Return Value.	MemeFarmer.sol	L: 0 C: 0
SWC-105	Pass	Unprotected Ether Withdrawal.	MemeFarmer.sol	L: 0 C: 0
SWC-106	Pass	Unprotected SELFDESTRUCT Instruction	MemeFarmer.sol	L: 0 C: 0
SWC-107	Pass	Read of persistent state following external call.	MemeFarmer.sol	L: 0 C: 0
SWC-108	Pass	State variable visibility is not set	MemeFarmer.sol	L: 0 C: 0
SWC-109	Pass	Uninitialized Storage Pointer.	MemeFarmer.sol	L: 0 C: 0
SWC-110	Pass	Assert Violation.	MemeFarmer.sol	L: 0 C: 0





ID	Severity	Name	File	location
SWC-111	Pass	Use of Deprecated Solidity Functions.	MemeFarmer.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	MemeFarmer.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	MemeFarmer.sol	L: 0 C: 0
SWC-114	Pass	Transaction Order Dependence.	MemeFarmer.sol	L: 0 C: 0
SWC-115	Pass	Authorization through tx.origin.	MemeFarmer.sol	L: 0 C: 0
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	MemeFarmer.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	MemeFarmer.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	MemeFarmer.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	MemeFarmer.sol	L: 0 C: 0
SWC-120	Pass	Potential use of block.number as source of randonmness.	MemeFarmer.sol	L: 0 C: 0
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	MemeFarmer.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	MemeFarmer.sol	L: 0 C: 0
SWC-123	Pass	Requirement Violation.	MemeFarmer.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	MemeFarmer.sol	L: 0 C: 0
SWC-125	Pass	Incorrect Inheritance Order.	MemeFarmer.sol	L: 0 C: 0





ID	Severity	Name	File	location
SWC-126	Pass	Insufficient Gas Griefing.	MemeFarmer.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	MemeFarmer.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	MemeFarmer.sol	L: 0 C: 0
SWC-129	Pass	Typographical Error.	MemeFarmer.sol	L: 0 C: 0
SWC-130	Pass	Right-To-Left-Override control character (U +202E).	MemeFarmer.sol	L: 0 C: 0
SWC-131	Pass	Presence of unused variables.	MemeFarmer.sol	L: 0 C: 0
SWC-132	Pass	Unexpected Ether balance.	MemeFarmer.sol	L: 0 C: 0
SWC-133	Pass	Hash Collisions with Multiple Variable Length Arguments.	MemeFarmer.sol	L: 0 C: 0
SWC-134	Pass	Message call with hardcoded gas amount.	MemeFarmer.sol	L: 0 C: 0
SWC-135	Pass	Code With No Effects (Irrelevant/Dead Code).	MemeFarmer.sol	L: 0 C: 0
SWC-136	Pass	Unencrypted Private Data On-Chain.	MemeFarmer.sol	L: 0 C: 0

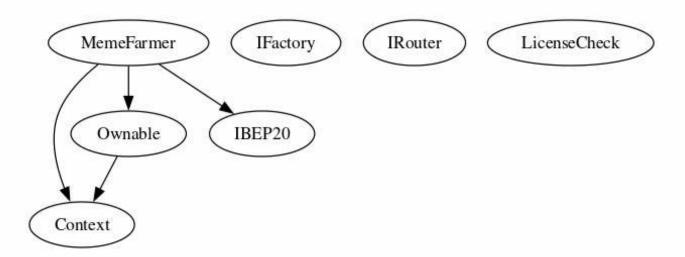
We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.





Inheritance

The contract for MemeFarmer has the following inheritance structure.





Smart Contract Advance Checks

ID	Severity	Name	Result	Status
MemeF-01	Minor	Potential Sandwich Attacks.	Pass	Not-Found
MemeF-02	Minor	Function Visibility Optimization	Pass	Not-Detected
MemeF-03	Major	Lack of Input Validation.	Pass	Not-Detected
MemeF-04	Major	Centralized Risk In addLiquidity.	Pass	Not-Detected
MemeF-05	Major	Missing Event Emission.	Pass	Not-Detected
MemeF-06	Minor	Conformance with Solidity Naming Conventions.	Pass	Not-Detected
MemeF-07	Minor	State Variables could be Declared Constant.	Pass	Not-Found
MemeF-08	Minor	Dead Code Elimination.	Pass	Not-Found
MemeF-09	Major	Third Party Dependencies.	Pass	Not-Found
MemeF-10	Major	Initial Token Distribution.	Pass	Not-Found
MemeF-11	Minor	Airdrop is present in code.	Pass	Not-Detected
MemeF-12	Major	Centralization Risks In The X Role	Pass	Not-Found
MemeF-13	Informational	Extra Gas Cost For User	Pass	Not-Found
MemeF-6	Minor	Unnecessary Use Of SafeMath	Pass	Not-Detected
MemeF-15	Medium	Symbol Length Limitation due to Solidity Naming Standards.	Pass	Not-Found





ID	Severity	Name	Result	Status
MemeF-16	Meduium	Invalid collection of Taxes during Transfer.	Pass	Not-Detected
MemeF-17	Informational	Conformance to numeric notation best practice.	Pass	Not-Found
MemeF-18	Critical	Stop Transactions by using Enable Trade.	Fail	Detected, Owner needs to enable trade.





MemeF-18 | Stop Transactions by using Enable Trade.

Category	Severity	Location	Status
Logical Issue	Critical	MemeFarmer.sol: 469, 13	Detected, Owner needs to enable trade.

Description

Enable Trade is presend 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.
Major	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
Minor	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.
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	0	0
Major	0	0	0
Medium	0	0	0
Minor	0	0	0
Informational	0	0	0
Total	1	0	0





Social Media Checks

Social Media	URL	Result
Twitter	https://x.com/memefarmers1/	Pass
Other		Fail
Website	https://memefarmer.site	Pass
Telegram	https://t.me/+qD2Kgg6TKDY1NzVk	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	89/100
Auditor Score	87/100
Review by Section	Score
Manual Scan Score	33/53
SWC Scan Score	37/37
Advance Check Score	19 /19

The Following Score System Has been Added to this page to help understand the value of the audit, the maximun score is 100, however to attain that value the project most pass and provide all the data needed for the assessment. Our Passing Score has been changed to 80 Points, if a project does not attain 80% is an automatic failure. Read our notes and final assessment below.

Audit Passed







Assessment Results

Important Notes:

- Owner can't set max tx amount.
- Owner needs to enable trade.
- No high-risk Exploits/Vulnerabilities Were Found in the Source Code.
- Contract has been developed by Freddy and follow the coding best practices, we have fully tested the code and its functionalities.

Auditor Score = 87 Audit Passed







Appendix

Finding Categories

Centralization / Privilege

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

Gas Optimization

Gas Optimization findings do not affect the functionality of the code but generate different, more optimalEVM 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 howblock.timestamp works.

Control Flow

Control Flow findings concern the access control imposed on functions, such as owneronly functionsbeing 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 mayresult in a vulnerability.

Coding Style

Coding Style findings usually do not affect the generated byte-code but rather comment on how to makethe 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 setterfunction.

Coding Best Practices

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





Disclaimer

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