



SPYWOLF

Security Audit Report



Audit prepared for
Gelato (Locker)

Completed on
December 5, 2024





OVERVIEW

This goal of this report is to review the main aspects of the project to help investors make an informative decision during their research process.

You will find a summarized review of the following key points:

- ✓ Contract's source code
- ✓ Owners' wallets
- ✓ Tokenomics
- ✓ Team transparency and goals
- ✓ Website's age, code, security and UX
- ✓ Whitepaper and roadmap
- ✓ Social media & online presence

“

The results of this audit are purely based on the team's evaluation and does not guarantee nor reflect the projects outcome and goal

”

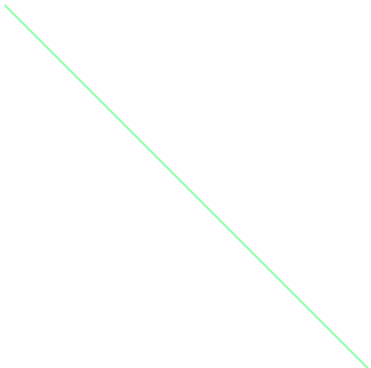
- SPYWOLF Team -





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KEY RESULTS

Cannot mint new tokens	*
Cannot pause trading (honeypot)	*
Cannot blacklist an address	*
Cannot raise taxes over 25%?	*
No proxy contract detected	PASSED
Not required to enable trading	*
No hidden ownership	PASSED
Cannot change the router	PASSED
No cooldown feature found	*
Bot protection delay is lower than 5 blocks	*
Cannot set max tx amount below 0.05% of total supply	*
The contract cannot be self-destructed by owner	PASSED

For a more detailed and thorough examination of the heightened risks, refer to the subsequent parts of the report.

N/A = Not applicable for this type of contract

*Not applicable for this type of contract



Gelato (Locker)



PROJECT DESCRIPTION:

Gelato is an Innovative Utility Fee Token on PulseChain that combines Hyper Deflation, Deep Liquidity Webs and User Rewards.

- Gelato is the very first token to buy and burn SolidX
- Gelato rewards users with SolidX and pHex
- Gelato is Hyper Deflationary
- Gelato has a 3 phase liquidity strategy with deep, adaptive, intelligent webs designed for volume, scarcity, & continuous price performance.

Release Date: Dec 5, 2024

Category: Dividend token

01



CONTRACT INFO

Token Name N/A	Symbol N/A
Contract Address 0xB2430CD9512948467d65442ac74174571b4C6B72	
Network PLS	Language Solidity
Deployment Date Dec 04, 2024	Contract Type Token locker
Total Supply N/A	Decimals N/A

TAXES



Our Contract Review Process

The contract review process pays special attention to the following:

- ✓ Testing the smart contracts against both common and uncommon vulnerabilities
- ✓ Assessing the codebase to ensure compliance with current best practices and industry standards.
- ✓ Ensuring contract logic meets the specifications and intentions of the client.
- ✓ Cross referencing contract structure and implementation against similar smart contracts produced by industry leaders.
- ✓ Thorough line-by-line manual review of the entire codebase by industry experts.

Blockchain security tools used:

- OpenZeppelin
- Mythril
- Solidity Compiler
- Hardhat



SMART CONTRACT STATS

Calls Count	unavailable
External calls	unavailable
Internal calls	unavailable
Transactions count	unavailable
Last transaction time	unavailable
Deployment Date	unavailable
Create TX	unavailable
Owner	unavailable
Deployer	unavailable

TOKEN TRANSFERS STATS

Transfer Count	unavailable
Total Amount	unavailable
Median Transfer Amount	unavailable
Average Transfer Amount	unavailable
First transfer date	unavailable
Last transfer date	unavailable
Days token transferred	unavailable



VULNERABILITY ANALYSIS

ID	Title	
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



VULNERABILITY ANALYSIS

ID	Title	
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



VULNERABILITY ANALYSIS

NO ERRORS FOUND



MANUAL CODE REVIEW

When performing smart contract audits, our specialists look for known vulnerabilities as well as logical and access 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 4 different threat levels.

THREAT 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

Information level is to offer suggestions for improvement of efficacy or security for features with a risk free factor.



FOUND THREATS

High Risk: 0

No high risk-level threats found in this contract.

Medium Risk: 0

No medium risk-level threats found in this contract.

Low Risk: 0

No low risk-level threats found in this contract.



FOUND THREATS

Informational

Owner can retrieve LP tokens of GELATO/WPLS only after lockTime is expired.

```
function endLock() public onlyOwner {
    require(block.timestamp >= lockTime, "LP tokens are still locked.");

    address lpPair1;
    try IDEXFactory(pulseRouterV1.factory()).getPair(pulseRouterV1.WPLS(), address(gelatoToken)) returns (address _lpPair1) {
        lpPair1 = _lpPair1;
        IDEXPair lpToken1 = IDEXPair(lpPair1);
        lpToken1.transfer(owner(), lpToken1.balanceOf(address(this)));
    } catch {}

    address lpPair2;
    try IDEXFactory(pulseRouterV2.factory()).getPair(pulseRouterV2.WPLS(), address(gelatoToken)) returns (address _lpPair2) {
        lpPair2 = _lpPair2;
        IDEXPair lpToken2 = IDEXPair(lpPair2);
        lpToken2.transfer(owner(), lpToken2.balanceOf(address(this)));
    } catch {}

    address lpPair3;
    try IDEXFactory(nineinchRouter.factory()).getPair(nineinchRouter.WETH(), address(gelatoToken)) returns (address _lpPair3) {
        lpPair3 = _lpPair3;
        IDEXPair lpToken3 = IDEXPair(lpPair3);
        lpToken3.transfer(owner(), lpToken3.balanceOf(address(this)));
    } catch {}

    lockEnded = true;
    emit LockEnded();
}
```

Owner can extend current lock time with up to 1 year per transaction. Initial lock time is set within the constructor during contract's deployment.

```
function extendLockTime(uint256 _extraLockTime) public onlyOwner {
    require(_extraLockTime > 0 && _extraLockTime <= 31536000, "Lock time can only be extended up to one year per call.");

    lockTime += _extraLockTime;
    emit ParameterUpdated();
}

constructor(
    address _pulseRouterV1,
    address _pulseRouterV2,
    address _nineinchRouter,
    address _gelatoToken,
    uint256 _lockTime
) {
    .....
    require(_lockTime - block.timestamp <= 31536000, "Only 1 year can be initially set.");
    lockTime = _lockTime;
}
```




FOUND THREATS

Informational

Owner withdraw GELATO/WPLS pair on lock expiry but on `withdrawTokens()` comparison is made for GELATO/WETH pair.

```
function endLock() public onlyOwner {  
    .....  
    IDEXPair lpToken3 = IDEXPair(IDEXFactory(nineinchRouter.factory()).getPair(nineinchRouter.WPLS(), address(gelatoToken)));  
    .....  
}  
  
function withdrawTokens(address _token) public onlyOwner {  
    .....  
    IDEXPair lpToken3 = IDEXPair(IDEXFactory(nineinchRouter.factory()).getPair(nineinchRouter.WETH(), address(gelatoToken)));  
    require(_token != address(lpToken1) || _token != address(lpToken2) || _token != address(lpToken3), "You can not withdraw LP token.");  
    .....  
}
```

- Recommendation:
 - Correct with the right pair if this is not intentional.



FOUND THREATS

Informational

Owner can withdraw native (PLS) tokens from the contract. If owner is set to multisig wallet, it might not use this functionality. Multi sig wallets typically invoke internal functionality on receiving ETH (PLS), which will require more gas than the assigned from .transfer method.

```
function withdraw() public onlyOwner {  
    uint256 balance = address(this).balance;  
    payable(msg.sender).transfer(balance);  
}
```

- Recommendation:
 - If intended to use multi sig wallet for owner in future, use .call() without gas limit instead of .transfer()



SPYWOLF

CRYPTO SECURITY

Audits | KYCs | dApps
Contract Development

ABOUT US

We are a growing crypto security agency offering audits, KYCs and consulting services for some of the top names in the crypto industry.

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Disclaimer

This report shows findings based on our limited project analysis, following good industry practice from the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, overall social media and website presence and team transparency details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report.

While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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No applications were reviewed for security. No product code has been reviewed.