Smart Contract Audit Report

Audit was conducted on the TDH Smart Contract

Smart Contract	TDH
Type Of Utility	DogeChain Contract
Platform	DogeChain, Ethereum Virtual Machine
ChainId	2000
Language	Solidity >0.8.0
Address	0x1c2bB5d2812D307C2056C6A406d334676D067EE9

Audit Score

Section Score Codebase Security	100%
Codebase Complexity and Practices	98%
Owner Privileges and Control	62%
Overall Score	86%

Branding:

https://thedruggedhuskies.io/

discord.gg/7s8gUB7CQW

https://t.me/TheDruggedHuskiesOfficial

https://twitter.com/DruggedHuskies

Content

Scope of the audit

This Audit Report mainly focuses on the overall security of the TDH token Smart Contract. This audit was conducted with rigorous attention to the general implementation of the contract and by examining the overall architectural layout of the software implementation. The reliability and correctness of this smart contract's codebase are being assessed.

Security Scope

Identifies security related issues within each contract and the system of contract.

General Code Quality

A full assessment of the code quality and general software architecture patterns and best practices used.

Auditing Methods Used

Rigorous testing of the project has been performed. Detailed code base analysis was conducted, reviewing the smart contract architecture to ensure it is structured and safe.

A detailed, line by line inspection of the codebase was conducted to find any potential security vulnerabilities such as denial of service attacks, race conditions, transaction-ordering dependence, timestamp dependence, and denial of service attacks.

Automated and manual testing was employed that included:

– Analysis of on-chain data security
– Analysis of the code in-depth and detailed, manual review of the code, line-by-line.
– Deployment of the code on an in-house testnet blockchain and running live tests
– Determining failure preparations and if worst-case scenario protocols are in place
– Analysis of any third-party code use and verifying the overall security

Tools Used:
Remix IDE, Ganache, SolHint, VScode, Mythril, Contract Library Hardhat

Assessing Possible Issues

Any issue detected during the conduction of this audit will be categorized under one of 3 severity levels: low, medium, and high.

Low level Severity Issues

Issues that do not pose any serious threat to the functionality of the software.

Medium level Severity issues

Issues that can cause potential problems to the overall health of the software application but that can be fixed without having any breaking changes on the current functionality.

High level Severity issues

Critical issues that affect the smart contract's overall performance and functionality. These issues should be fixed urgently.

General Issues Report

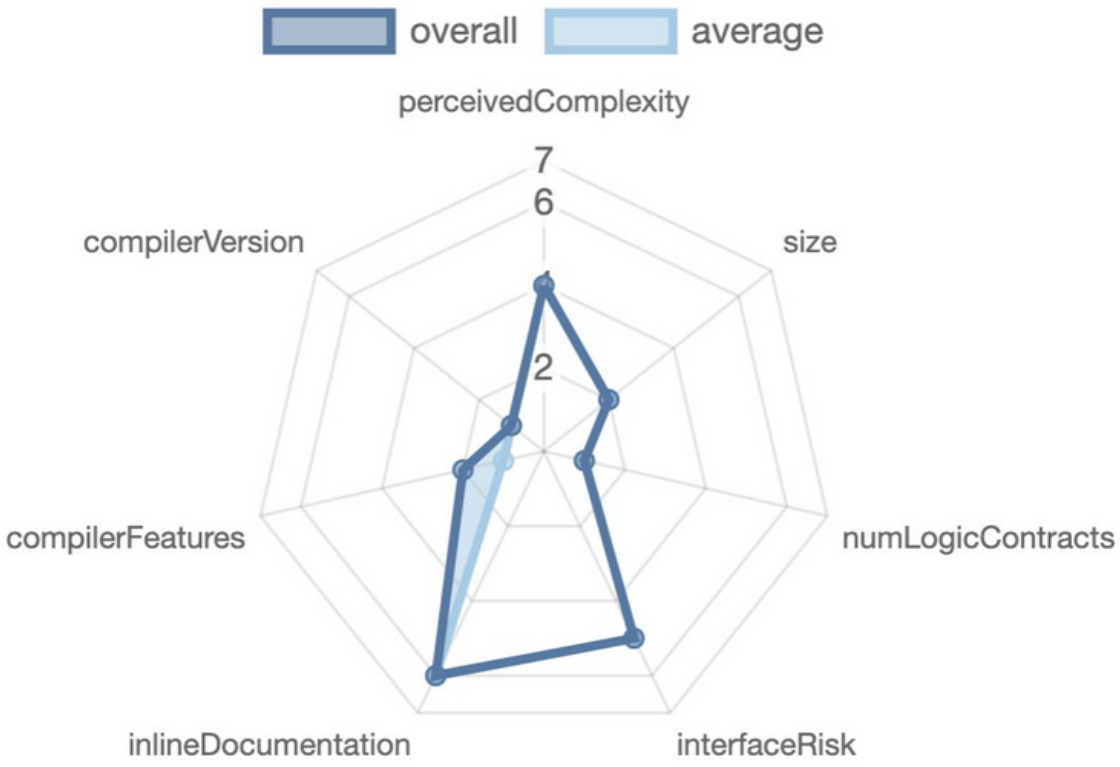
General issues that were found during manual and automatic assessments

No	Issue Verification	Status
1	Compiler warnings	Passed
2	Reentrancy and Race Conditions.	Passed
3	Possible delays in data delivery.	Passed
4	Oracle calls.	Passed
5	Front running.	Passed
6	DoS with block gas limit.	Passed
7	DoS with Revert.	Passed
8	Timestamp dependence.	Passed
9	Methods execution permissions.	Passed
10	Economy model.	Passed
11	The impact of the exchange rate on the logic.	Passed
12	Private user data leaks.	Passed
13	Scoping and Declarations.	Passed
14	Arithmetic accuracy.	Passed

Issues Found

Low Level Severity	Medium Level Severity	High Level Severity
0	0	0

Risk Assessment



Manual Code Inspection

The code of the target contract and its dependencies was reviewed, deployed, and manually tested by our developers.

No	Contract	Issues
1	TDH	2
2	Ownable	None
3	Context	None

Issues Found

Low Level Severity	Medium Level Severity	High Level Severity
0	1	1

Inspections

Contract	TDH
Address	0x1c2bB5d2812D307C2056C6A406d334676D067EE9
Issues	2
Notes	BEP-20 Token

Issues

1. Mint

```
489  /**
490   * @dev Creates `amount` tokens and assigns them to `msg.sender`, increasing
491   * the total supply.
492   *
493   * Requirements
494   *
495   * - `msg.sender` must be the token owner
496   */
497  function mint(uint256 amount) public onlyOwner returns (bool) {
498    _mint(_msgSender(), amount);
499    return true;
500  }
```

Line Severity	497
Severity	High
Method	function mint(uint256 amount) public onlyOwner returns (bool)
Notes	Owner can mint tokens. Renounce ownership to make it safe for investors.

2. Burn

```
502  /**
503   * @dev Burn `amount` tokens and decreasing the total supply.
504   */
505  function burn(uint256 amount) public returns (bool) {
506    _burn(_msgSender(), amount);
507    return true;
508  }
```

Line	505
Severity	Medium
Method	function burn(uint256 amount) public returns (bool)
Description	Burn tokens if interfaced with malicious front end will burn the holder's tokens
Notes	

Access Control and Privileges

The contract uses a single owner access control system for setting contract specific parameters.

TDH.sol

Role	Privileges
Owner	renounceOwnership, transferOwnership, mint

The owner can:
● Mint tokens

Notes

The owner of this contract can mint tokens endlessly. We suggest to renounce ownership to make it safe for investors.

Conclusion

The TDH Smart contracts contains 1 high severity issue!

Audit Score

Section	Score
Codebase Security	100%
Codebase Complexity and Practices	98%
Owner Privileges and Control	62%
Overall Score	86%

TDH HAS PASSED THE SMART CONTRACT AUDIT BY DOGETOOLS SECURITY

Smart contract Audit: 5th April 2023. 16:00 pm UTC
https://github.com/DogeTools Security/audits

Disclaimer

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. 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 based on 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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