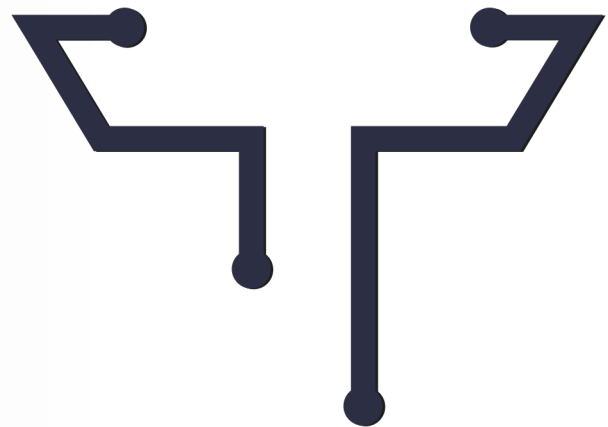




DiSpectra Audit Report

Project Name: TidalFlow AI



✉ audit@dispectra.com

🐙 [dispectra/audit](https://github.com/dispectra/audit)

🌐 <https://dispectra.com/audit>

Please verify the
authenticity of this report on our github.

Introduction & Info

Auditing Firm	DiSpectra Network
Client Firm	TidalFlow AI Solutions
Methodology	Automated Analysis, Manual Review
Language	Solidity
Contract	0xfE958AbE1b66C203eDf439BA99E9c03 B212e0d7c {Will Update}
Blockchain	Binance Smart Chain 0x97
Centralization	Active Ownership
Website	https://tidalflow.net
Telegram	https://t.me/tidalflow
Twitter	https://twitter.com/TidalFlowAI
All Socials	https://linktr.ee/tidalflow
Report Date	June 19, 2023

Authorized Signature

Executive Summary

DiSpectra has performed the automated and manual analysis of solidity codes. Solidity codes were reviewed for common contract vulnerabilities and centralized exploits. Here's a quick audit summary:

Status	Critical	Major	Medium	Minor	Unknown
Open	0	0	0	2	0
Acknowledged	0	0	1	2	1
Resolved	0	0	0	0	0
Noteworthy Privileges	Open Trade, Change Pair Address, Withdraw Fee				



Please note that smart contracts deployed on blockchains aren't resistant to exploits, vulnerabilities and/or hacks. Blockchain and cryptography assets utilize new and emerging technologies. These technologies present a high level of ongoing risks. For a detailed understanding of risk severity, source code vulnerability and audit limitations, kindly review the audit report thoroughly.



Please note thath centralization privilages regardless of their inherited rish status - constitute an elevated impact on smart contract safety and security.

Findings

Ownership

- The contract utilizes the Ownable contract, which allows for ownership functionality.
- The contract owner has the ability to transfer ownership to a new address or renounce ownership completely.

Trade Enablement

- The contract includes a tradeEnabled variable, which determines whether token transfers are allowed.
- Only the contract owner can enable trading by setting tradeEnabled to true.

Fee Calculation and Transfer

- The contract implements a buy fee of 1% and a sell fee of 3%.
- The _transfer function calculates and transfers the appropriate amounts of fees during buy and sell transactions.

Transfer Restrictions

- The _transfer function checks whether trade is enabled or the sender is the contract owner before allowing the transfer to proceed.
- If trade is not enabled or the sender is not the contract owner, the token transfer is rejected.

Taxes

- The contract charges a 1% tax on token buy transactions and a 3% tax on token sell transactions.
- The _transfer function calculates the respective taxes during token buy and sell transactions and transfers the appropriate amounts to the relevant addresses.

Findings

Contract Owner Operations

- The contract owner can use their ownership rights to enable token trading, change the pair address, and withdraw fees collected from token sales.

Limitations and Recommendations

- No significant security issues or deficiencies have been identified during the review. The contract successfully provides the basic functionality of an ERC20 token.
- However, the following recommendations are made for future sustainability and user experience:
 - a.** The contract documentation can be improved, and more explanations can be added regarding the usage of functions.
 - b.** More details can be provided regarding the token's economy and tokenomics.
 - c.** It is recommended to add events and preconditions to further control the usage of functions within the contract.

Conclusion

- The TidalFlow_BEP20 contract is well-designed to provide the core functionality and security of the TidalFlow (TDW) BEP20-compliant token. The audit has confirmed that the contract is secure and operates as expected.
- This audit report is based on the audited version of the contract and the available information. It is advised to re-audit the contract as it gets updated or modified to ensure its security.
- This report solely reflects the evaluations made by the auditor based on the available information and does not imply any form of warranty or guarantee.

Get a price quote from our website for smart contract development, project development, web3 development, blockchain engineering, mobile development, and more.



audit@dispectra.com



[dispectra/audit](https://github.com/dispectra/audit)



<https://dispectra.com/audit>