



# OVNI Smart Contract Security Audit

TechRate
June, 2021

# **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. 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 below disclaimer below – please make sure to read it in full.

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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

# **Background**

TechRate was commissioned by OVNI to perform an audit of smart contracts:

- https://bscscan.com/address/0xb52C99E31Fdd0c8A66984F6257AccBe6d2544 37f#code
- https://bscscan.com/address/0x9E3571fbf2c4199c7E4e4167Fa897891C56576 E0#code
- https://bscscan.com/address/0x84E5bB602Ce815D791eF7a8454ce767141031 8EF#code

#### The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

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The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

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# **Issues Checking Status**

Issue description	Checking status
1. Compiler errors.	Passed
2. Race conditions and Reentrancy. Cross-function race conditions.	e Passed
3. Possible delays in data delivery.	Passed
4. Oracle calls.	Passed
5. Front running.	Passed
6. Timestamp dependence.	Passed
7. Integer Overflow and Underflow.	Passed
8. DoS with Revert.	Passed
9. DoS with block gas limit.	Low issues
10. Methods execution permissions.	Passed
11. Economy model of the contract.	Passed
12. The impact of the exchange rate on the logic.	Passed
13. Private user data leaks.	Passed
14. Malicious Event log.	Passed
15. Scoping and Declarations.	Passed
16. Uninitialized storage pointers.	Passed
17. Arithmetic accuracy.	Passed
18. Design Logic.	Low issues
19. Cross-function race conditions.	Passed
20. Safe Open Zeppelin contracts implementation and usage.	Passed
21. Fallback function security.	Passed

# **Security Issues**

## High Severity Issues

No high severity issues found.

## Medium Severity Issues

No medium severity issues found.

# Low Severity Issues

#### 1. Block gas limit

#### Issue:

add(uint256 \_allocPoint, ...), set(uint256 \_pid, ...) and updateEmissionRate() could invoke massUpdatePools() function, that can fail due to block gas limit if the pool size is too big.

#### 1. Wrong burning

#### Issue:

There is sending tokens to the dead address in safeOvniTransfer functions, instead of burning them in token contract. Also, if transferring amount would be more than turtle balance, then transferring to burn address is redundant, because balance will be already empty.

#### **Recommendation:**

There should be a burn instead of sending to the dead address.

#### Owner privileges

- Owner can change start block.
- Owner can change burn percent.
- Dev address can change dev address.
- · Fee address can change fee address.
- · Owner can mint.

## Conclusion

Smart contracts contain low severity issues!

#### TechRate note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.



