

# SMART CONTRACT SECURITY AUDIT

Seahorses

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Jenuary, 2024

Website: Approved.ltd



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#### **Disclaimer**

This is a standard report based on our automated and manual examination of cybersecurity vulnerabilities and framework flaws of the project's smart contract.

Reading the full analysis report is essential to build your understanding of project's security level. It is crucial to take note, though we have done our best to perform this analysis and report, that you should not rely on the our research and cannot claim what it states or how we created it.

Before making any judgments, you have to conduct your own independent research.

We will discuss this in more depth in the following disclaimer - please read it fully.

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Security analysis is based only on the smart contracts. No applications or operations were reviewed for security. No product code has been reviewed.



#### **Procedure**

#### Our analysis contains following steps:

- 1. Project Analysis;
- 2. Unit Testing:
  - Smart contract functions will be unit tested on multiple parameters and under multiple conditions to ensure that all paths of functions are functioning as intended.
  - In this phase intended behaviour of smart contract is verified.
  - In this phase, we would also ensure that smart contract functions are not consuming unnecessary gas.
  - · Gas limits of functions will be verified in this stage.
- 3. Automated Testing:
  - Mythril
  - Oyente
  - Manticore
  - Solgraph



## **Terminology**

## We categorize the finding into 4 categories based on their vulnerability:

- Low-severity issue less important, must be analyzed
- Medium-severity issue important, needs to be analyzed and fixed
- High-severity issue —important, might cause vulnerabilities, must be analyzed and fixed
- Critical-severity issue —serious bug causes, must be analyzed and fixed.

## Limitations

The security audit of Smart Contract cannot cover all vulnerabilities. Even if no vulnerabilities are detected in the audit, there is no guarantee that future smart contracts are safe. Smart contracts are in most cases safeguarded against specific sorts of attacks. In order to find as many flaws as possible, we carried out a comprehensive smart contract audit. Audit is a document that is not legally binding and guarantees nothing.

## **Basic Security Recommendation**

Unlike hardware and paper wallets, hot wallets are connected to the internet and store private keys online, which exposes them to greater risk. If a company or an individual holds significant amounts of cryptocurrency in a hot wallet, they should consider using MultiSig addresses. Wallet security is enhanced when private keys are stored in different locations and are not controlled by a single entity.



## Token Contract Details for 04.01.2024

Contract Name: Seahorses

Deployed address: 0x8BF5DBc9199E6Ee798907f100F1aC27b14D276df

Total Supply: 1,000,000,000

Token Tracker: **SEAH** 

Token holders: 1

## **Audit Details**



Project Name: Seahorses

Language: Solidity

Compiler Version: v0.8.0

Blockchain: **BSC** 

### **Social Profiles**

Project Website: https://www.seahorses.io/

Project Twitter: https://twitter.com/SeahorsesEco

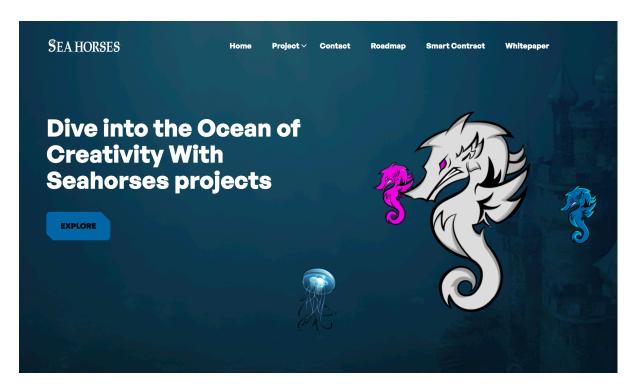
Project Telegram: https://t.me/SeahorsesECO/

Project Instagram: https://www.instagram.com/EcoSeahorses

Project Reddit: https://www.reddit.com/user/SeahorsesECO/



## **Project Website Overview**



- ✓ JavaScript errors hasn't been found.
- ✓ Malware pop-up windows hasn't been detected.
- ✓ No issues with loading elements, code, or stylesheets.



## Vulnerabilities checking

Issue Description	Checking Status
Compiler Errors	Completed
Delays in Data Delivery	Completed
Re-entrancy	Completed
Transaction-Ordering Dependence	Completed
Timestamp Dependence	Completed
Shadowing State Variables	Completed
DoS with Failed Call	Completed
DoS with Block Gas Limit	Completed
Outdated Complier Version	Completed
Assert Violation	Completed
Use of Deprecated Solidity Functions	Completed
Integer Overflow and Underflow	Completed
Function Default Visibility	Completed
Malicious Event Log	Completed
Math Accuracy	Completed
Design Logic	Completed
Fallback Function Security	Completed
Cross-function Race Conditions	Completed
Safe Zeppelin Module	Completed



## **Security Issues**

#### 1) Incorrect versions of solidity:

Check: solc-version

Severity: Low

Confidence: High

pragma solidity ^0.8.0;

#### **Description:**

Solc frequently releases new compiler versions. Using an old version prevents access to new solidity security checks. We also recommend avoiding complex pragma statement.

#### **Recommendation:**

Deploy with of the following solidity versions.

#### 1) Dead-Code:

Check: dead code

Severity: Low

Confidence: Medium

```
ftrace|funcSig
function _msgData() internal view virtual returns (bytes calldata) {
    return msg.data;
}
```



#### **Description:**

A function that is not sued.

#### **Recommendation:**

It is recommended to remove unused functions.

## Conclusion for project owner

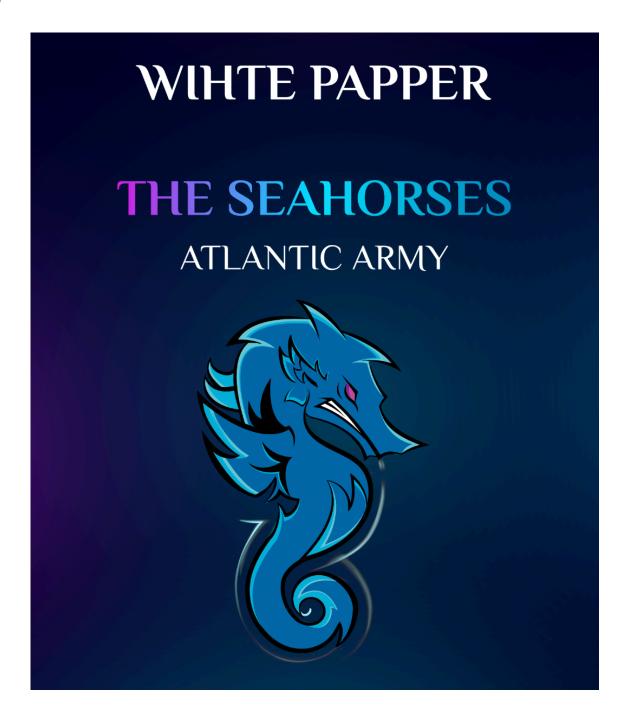
Low-severity issues exist within smart contracts.

NOTE: Please check the disclaimer above and note, that the audit makes no statements or warranties on the business model, investment attractiveness, or code sustainability. Contract security report for community



## Whitepaper of the project

The whitepaper of Seahorses project has been verified on behalf of Approved team.



Whitepaper link: https://drive.google.com/file/d/ 1evnUcyelyxPY1CecNZ7GDVCJd-Ej5CCu/view



## **Approved Contact Info**

Website: https://approved.ltd

Telegram: @team\_approved

**GitHub:** https://github.com/Approved-Audits/smart\_contracts

