HackSafe

Smart Contract Security Audit Report

Minera Land

June 2022

Security Status

★★★★½

www.hacksafe.io

Audit Details

Audited project
Minera Land

Deployer address
0xE441d577caC17BBC4a11a4090A6Bc4D843173CEF

Client contacts
Minera land

Blockchain
Binance Smart Chain

Website
https://mineraland.io/#tokenomics

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.

Procedure

Step 1 - In-Depth Manual Review

Manual line-by-line code reviews to ensure the logic behind each function is sound and safe from various attack vectors. This is the most important and lengthy portion of the audit process (as automated tools often cannot find the nuances that lead to exploits such as flash loan attacks).

Step 2 - Automated Testing

Simulation of a variety of interactions with your Smart Contract on a test blockchain leveraging a combination of automated test tools and manual testing to determine if any security vulnerabilities exist.

Step 3 – Leadership Review

The engineers assigned to the audit will schedule meetings with our leadership team to review the contracts, any comments or findings, and ask questions to further apply adversarial thinking to discuss less common attack vectors.

Step 4 - Resolution of Issues

Consulting with the team to provide our recommendations to ensure the code's security and optimize its gas efficiency, if possible. We assist project team's in resolving any outstanding issues or implementing our recommendations.

Step 5 - Published Audit Report

Boiling down results and findings into an easy-to-read report tailored to the project. Our audit reports highlight resolved issues and any risks that exist to the project or its users, along with any remaining suggested remediation measures. Diagrams are included at the end of each report to help users understand the interactions which occur within the project.

Background

HackSafe was commissioned by Mland Token to perform an audit of smart contracts:

- https://bscscan.com/address/0xB08F67c04BfdF069017365969Ca19a0aE6e66B85#code

The purpose of the audit was to achieve the

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

The information in this report should be 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.

Contract Details

Token contract details for 07.06.2022

Contract name	: MLand
Contract address	: 0xB08F67c04BfdF069017365969Ca19a0aE6e66B85
Compiler version	: v0.8.13+commit.abaa5c0e
Total supply	: 100,000,000
Token Ticker	: MLAND
Decimals	: 18
Token Holders	: 1,693
Top 100 token holder's dominance	: 99.84%
Transactions count	: 24,214
Contract deployer address	: 0xE441d577caC17BBC4a11a4090A6Bc4D843173CEF
owner address	: 0xE441d577caC17BBC4a11a4090A6Bc4D843173CEF

Social profiles

CoinmarketCap profile	: https://coinmarketcap.com/currencies/mland-token/
Twitter Profile	: https://twitter.com/MineralandNFT
Telegram Profile	: https://t.me/mineralandglobal

Claimed Smart Contract Features

Claimed Feature Detail	Our Observation
Tokenomics : • **Name** : MLand Token • **Symbol** : MLAND • **Decimals** : 18 • **Total supply** : 100,000,000	YES, this is valid.

Audit Summary

According to the standard audit assessment, Customer`s solidity smart contracts are “Secured”. This token contract does contain owner control, which do not make it fully decentralized as owner have control to pause and unpause transfers.

Insecure	Poor secured	Secure	Well-secured

You are here 

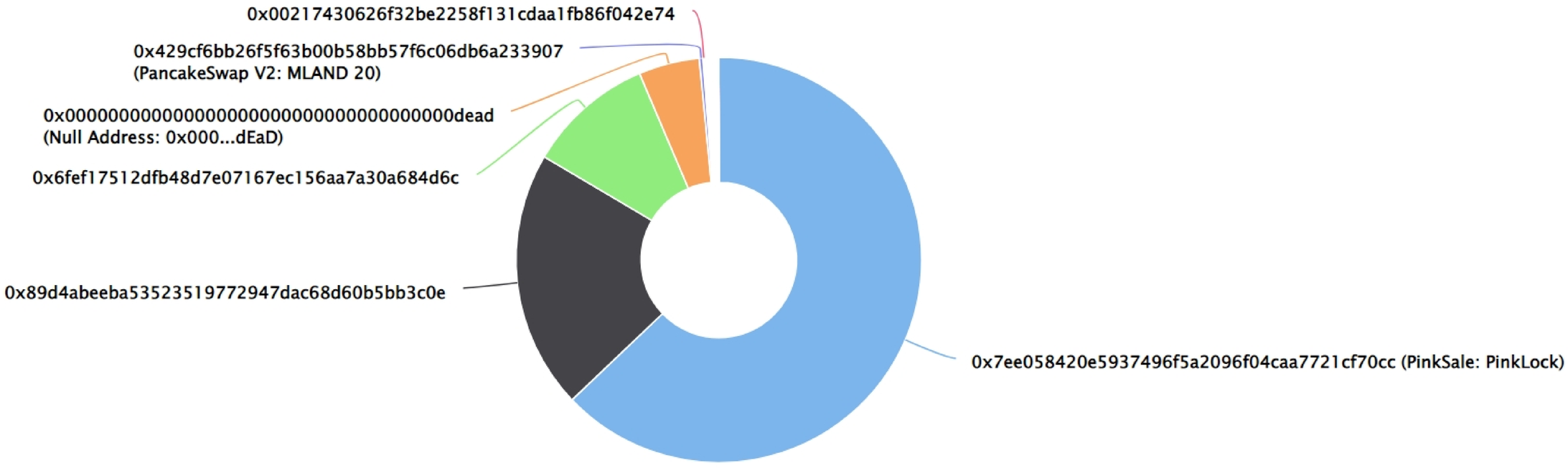
We used various tools like Slither, Mythril and Remix IDE. At the same time this finding is based on critical analysis of the manual audit. All issues found during automated analysis were manually reviewed and applicable vulnerabilities are presented in the Audit overview section. General overview is presented in AS-IS section and all identified issues can be found in the Audit overview section.

We found 0 critical, 0 high, 0 medium and 1 low and some very low-level issues. These issues are not critical ones.

Mland Token Distribution

Mland Token Top 500 Token Holders

Source: BscScan.com



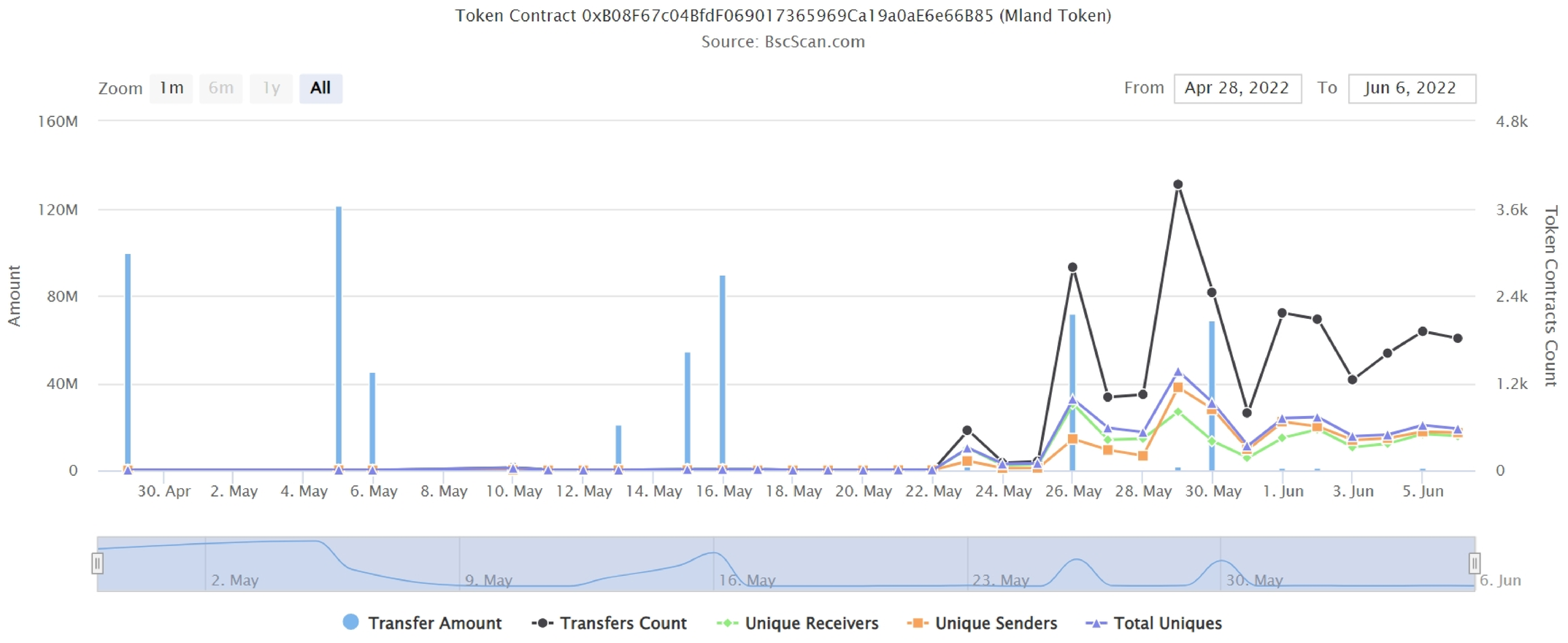
Mland Token Distribution

Mland Top 20 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	PinkSale: PinkLock	62,900,000	62.9000%
2	0x89d4abeeba53523519772947dac68d60b5bb3c0e	20,604,465.509999999999991	20.6045%
3	0x6fef17512dfb48d7e07167ec156aa7a30a684d6c	10,100,683.056077144603333766	10.1007%
4	Null Address: 0x000...dEaD	4,855,393	4.8554%
5	PancakeSwap V2: MLAND 20	288,626.343286374398688764	0.2886%
6	0x00217430626f32be2258f131cdaa1fb86f042e74	130,739.34645288888892084	0.1307%
7	0x161037750a7473a8a5b5a18721adff8e252236c2	43,805.640131232867700198	0.0438%
8	0xa4ab0249edc94335b51e8a94c38c1fbb414950fe	39,024.820663972443120285	0.0390%
9	0xbc6da5953f1ef4fa9184317766f8545bce2b0d7f	32,045	0.0320%
10	0xf1f6cdddcd9ef00597b693da2fe882bb253005f7	31,548	0.0315%
11	0x2a53c2d2707dc280516a4c9ac0ce15d82ce2abf6	28,471	0.0285%
12	0x397a3ab2b0b1df6d92f09b2ff85da766ec1cebb9	21,539	0.0215%
13	0x21f0f9d4055da8f18a7904d7583fa3544d43ee31	20,374	0.0204%
14	0xacb86260f3bb1fe3973cc436f0fbc75ca446d2ce	16,446	0.0164%
15	0x2c3a17fdc4359d7de3162c8fd99f533247aa7e12	16,105	0.0161%
16	0x1c282418b9f66d6c454c605c2a7c636f6e1e451d	15,834.626	0.0158%
17	0x0886cc10f5089c6e1750444b42cbdfed86b06de7	15,826.472	0.0158%
18	0x999750d883492bf05e0520397fd9874b61cf1985	15,352	0.0154%
19	0xf06ba251b3bccf6d5f5679312ddaec663337ab07	15,333	0.0153%
20	0x63210ce016d0f39c43d0b60122e2096a02bf6738	15,323	0.0153%

Mland Token Distribution

Mland Contract overview



Contract functions details

ERC20.sol
+ [Int] IERC20

-[Ext]totalSupply
-[Ext]balanceOf
-[Ext]transfer#
-[Ext]allowance
-[Ext]approve#
-[Ext]transferFrom#

+ [Lib] SafeMath

- [Int] add
- [Int] sub
- [Int] sub
- [Int] mul
- [Int] div
- [Int] div
- [Int] mod
- [Int] mod

+ BEPContext

- <Constructor>#
- [Int] _msgSender
- [Int] _msgData

+ BEPOwnable (BEPContext)

- <constructor > #
-[Pub] owner
- [Pub] isOwner
- [Pub] renounceOwnership #
  - modifier: onlyOwner
- [Pub] transferOwnership #
  - modifiers: onlyOwner
-[Int] _transferOwnership #

+ BEPPausable (BEPOwnable)

-[Pub] pause #
  -modifiers: onlyOwner, whenNotPaused
-[Pub] unpause #
  -modifiers: onlyOwner, whenPaused

Contract functions details

+ERC20 (BEPContext, IERC20, BEPPausable)

-[Pub] totalSupply

-[Pub] balanceOf

-[Pub] transfer#

-modifiers: whenNotPaused

-[Pub] allowance

-[pub] approve#

-modifiers: whenNotPaused

-[Pub] transferFrom#

-modifiers: whenNotPaused

-[Pub] increaseAllowance#

-modifiers: whenNotPaused

-[Pub] decreasseAllowance#

-modifiers: whenNotPaused

-[Int] _transfer#

-[Int] _mint#

-[Int] _burn#

-[Int] _approve#

-[Int] _burnFrom #

+ ERC20Detailed

-<constructor> #

-[Pub] name

-[Pub] symbol

-[Pub] decimals

MineralToken.sol

+ MLand (ERC20Detailed, ERC20)

-<constructor> #

-[Ext] burn #

($) = payable function

= non-constant function

Issues Checking Status

No.	Title	Status
1.	Unlocked Compiler Version	Passed
2.	Missing Input Validation	Passed
3.	Race conditions and Reentrancy. Cross-function race conditions.	Passed
4.	Possible delays in data delivery	Passed
5.	Oracle calls.	Passed
6.	Timestamp dependence.	Passed
7.	Integer Overflow and Underflow	Passed
8.	DoS with Revert.	Passed
9.	DoS with block gas limit.	Passed
10.	Methods execution permissions.	Passed
11.	Economy model of the contract.	Passed
12.	Private use data leaks.	Passed
13.	Malicious Event log.	Passed
14.	Scoping and Declarations.	Passed
15.	Uninitialized storage pointers.	Passed
16.	Arithmetic accuracy.	Passed
17.	Design Logic.	Passed
18.	Safe Open Zeppelin contracts implementation and usage.	Passed
19.	Incorrect Naming State Variable	Passed

Severity Definitions

Risk Level	Description
Critical	Critical vulnerabilities are usually straightforward to exploit and can lead to assets loss or data manipulations.
High	High-level vulnerabilities are difficult to exploit; however, they also have a significant impact on smart contract execution, e.g., public access to crucial functions
Medium	Medium-level vulnerabilities are important to fix; however, they can't lead to assets loss or data manipulations.
Low	Low-level vulnerabilities are mostly related to outdated, unused, etc. code snippets that can't have a significant impact on execution.

Security Issues

Critical Severity Issues

No critical severity issue found.

High Severity Issues

No high severity issue found.

Medium Severity Issues

No medium severity issues found.

Low Severity Issues

No low severity issue found.

Centralization

Owner Privileges (in the period when the owner is not renounced) :

- Mland CHAIN Contract:
    - Owner can transfer ownership.
    - Owner can renounce ownership.
    - Owner can pause and unpause transferring tokens.

This smart contract has some functions which can be executed by the Admin (Owner) only. If the admin wallet private key would be compromised, then it would create trouble. Following are Admin functions:

- **Pause** : Owner can pause transfer.
- **Unpause** : Owner can un pause transfer.
- **Transferownership** : Owner can transfer ownership.
- **Renounceownership** : Owner can renounce ownership, if owner pause transfers and renounce ownership then it may happen that user will not be able transfer their tokens as only owner can unpause the transfers in this case owner will be renounce to zero address.

Conclusion

Smart contract contains no severity issues! The further transfer and operations with the fund raised are not related to this particular contract.

HackSafe 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.