



# **Smart Contract Security Audit**

<u>TechRate</u> February, 2022

## **Audit Details**



**Audited project** 

**Poker World NFT** 



Deployer address

0x688351aecf5886585b4dc949df2feff5b38b996a



**Client contacts:** 

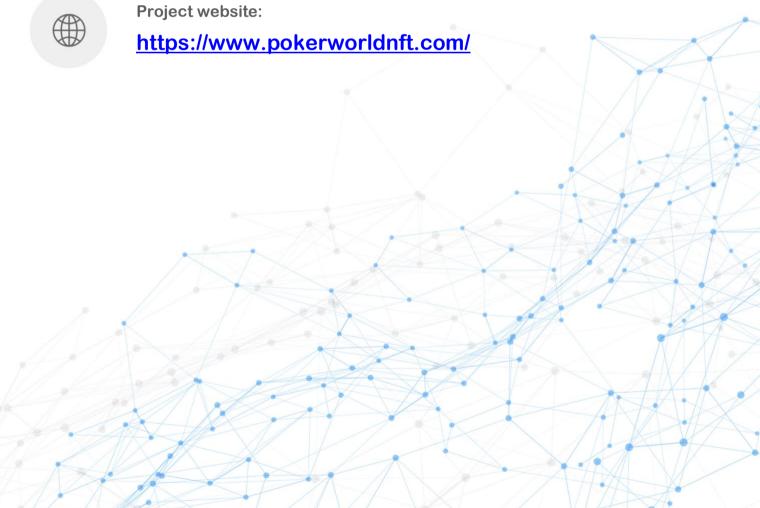
**Poker World NFT team** 



Blockchain

**Binance Smart Chain** 





## **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 Poker World NFT to perform an audit of smart contracts:

https://bscscan.com/address/0x5916ab98ebf6424661d1af4a5124d28a552fbef8#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.

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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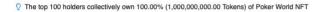
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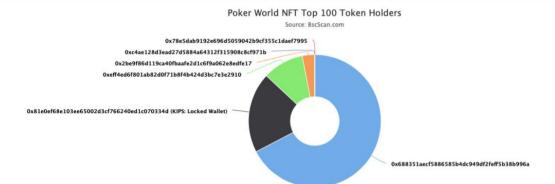
## **Contracts Details**

#### Token contract details for 12.02.2022

Contract name	Poker World NFT
Contract address	0x5916aB98Ebf6424661d1Af4A5124D28A552fBeF8
Total supply	1,000,000,000
Token ticker	POKR
Decimals	9
Token holders	8
Transactions count	13
Top 100 holders dominance	100.00%
Contract deployer address	0x688351aecf5886585b4dc949df2feff5b38b996a
Contract's current owner address	0x688351aecf5886585b4dc949df2feff5b38b996a

# Poker World NFT Token Distribution





(A total of 1,000,000,000.000 tokens held by the top 100 accounts from the total supply of 1,000,000,000.00 token)

# Poker World NFT Contract Interaction Details



# Poker World NFT Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	0x688351aecf5886585b4dc949df2feff5b38b996a	673,621,887.5	67.3622%
2		196,000,000	19.6000%
3	0xeff4ed6f801ab82d0f71b8f4b424d3bc7e3e2910	100,000,000	10.0000%
4	0x2be9f86d119ca40fbaafe2d1c6f9a062e8edfe17	29,998,550	2.9999%
5	☐ 0xc4ae128d3ead27d5884a64312f315908c8cf971b	378,000	0.0378%
6	0x78e5dab9192e696d5059042b9cf355c1daef7995	1,250	0.0001%
7	0x1def645201a61bd555ca932b514b17998b659def	200	0.0000%
8	0x81356893b30f6b11aab96022927b00a16f28eefd	112.5	0.0000%



## **Contract functions details**

#### + [Int] IERC20 - [Ext] totalSupply - [Ext] balanceOf - [Ext] transfer # - [Ext] allowance - [Ext] approve # - [Ext] transferFrom # + [Int] IERC20Metadata (IERC20) - [Ext] name - [Ext] symbol - [Ext] decimals + Context - [Int] \_msgSender - [Int] msqData + [Lib] SafeMath - [Int] add - [Int] sub - [Int] mul - [Int] div - [Int] mod - [Int] sub + [Lib] Address - [Int] isContract - [Int] sendValue # - [Int] functionCall # - [Int] functionCall # - [Int] functionCallWithValue # - [Int] functionCallWithValue # - [Int] functionStaticCall - [Int] functionStaticCall - [Int] functionDelegateCall # - [Int] functionDelegateCall # - [Prv] verifyCallResult + Ownable (Context) - [Pub] <Constructor> # - [Pub] owner - [Pub] renounceOwnership # - modifiers: onlyOwner - [Pub] transferOwnership # - modifiers: onlyOwner - [Pub] getUnlockTime - [Pub] lock # - modifiers: onlyOwner - [Pub] unlock #

<sup>+</sup> Manageable (Context)

```
- [Pub] <Constructor> #
 - [Pub] manager
 - [Ext] transferManagement #
   - modifiers: onlyManager
+ [Int] | PancakeV2Factorv
 - [Ext] createPair #
+ [Int] IPancakeV2Router
 - [Ext] factory
 - [Ext] WETH
 - [Ext] addLiquidityETH ($)
 - [Ext] swapExactTokensForETHSupportingFeeOnTransferTokens #
+ Tokenomics
 - [Pub] <Constructor> #
 - [Prv] _addFee #
 - [Prv] _addFees #
 - [Int] getFeesCount
 - [Prv] _getFeeStruct
 - [Int] _getFee
 - [Int] _addFeeCollectedAmount #
 - [Int] getCollectedFeeTotal
+ Presaleable (Manageable)
 - [Ext] setPreseableEnabled #
   - modifiers: onlyManager
+ BaseRfiToken (IERC20, IERC20Metadata, Ownable, Presaleable, Tokenomics)
 - [Pub] <Constructor> #
 - [Ext] name
 - [Ext] symbol
 - [Ext] decimals
 - [Ext] totalSupply
 - [Pub] balanceOf
 - [Ext] transfer #
 - [Ext] allowance
 - [Ext] approve #
 - [Ext] transferFrom #
 - [Ext] burn #
 - [Int] _burnTokens #
 - [Pub] increaseAllowance #
 - [Pub] decreaseAllowance #
 - [Ext] is Excluded From Reward
 - [Ext] reflectionFromToken
 - [Int] tokenFromReflection
 - [Ext] excludeFromReward #
  - modifiers: onlyOwner
 - [Int] exclude #
 - [Ext] includeInReward #
  - modifiers: onlyOwner
 - [Ext] setExcludedFromFee #
  - modifiers: onlyOwner
 - [Pub] isExcludedFromFee
```

- [Int] \_approve #

```
- [Int] _isUnlimitedSender
 - [Int] isUnlimitedRecipient
 - [Prv] _transfer #
 - [Prv] transferTokens #
 - [Prv] takeFees #
 - [Int] getValues
 - [Int] _getCurrentRate
 - [Int] _getCurrentSupply
 - [Int] beforeTokenTransfer #
 - [Int] getSumOfFees
 - [Int] _isV2Pair
 - [Int] redistribute #
 - [Int] takeTransactionFees #
+ Liquifier (Ownable, Manageable)
 - [Ext] <Fallback> ($)
 - [Int] initializeLiquiditySwapper #
 - [Int] liquify #
 - [Prv] _setRouterAddress #
 - [Prv] _swapAndLiquify #
  - modifiers: lockTheSwap
 - [Prv] _swapTokensForEth #
 - [Prv] addLiquidity #
 - [Ext] setRouterAddress #
  - modifiers: onlyManager
 - [Ext] setSwapAndLiquifyEnabled #
   - modifiers: onlyManager
 - [Ext] withdrawLockedEth #
   - modifiers: onlyManager
 - [Int] approveDelegate #
+ Antiwhale (Tokenomics)
 - [Int] _getAntiwhaleFees
+ SafeToken (BaseRfiToken, Liquifier, Antiwhale)
 - [Pub] <Constructor> #
 - [Int] _isV2Pair
 - [Int] getSumOfFees
 - [Int] _beforeTokenTransfer #
 - [Int] _takeTransactionFees #
 - [Prv] _burn #
 - [Prv] takeFee #
 - [Prv] _takeFeeToETH #
 - [Int] approveDelegate #
+ poker (SafeToken)
 - [Pub] <Constructor> #
   - modifiers: SafeToken
($) = payable function
# = non-constant function
```

# **Issues Checking Status**

Issue description	Checking status
1. Compiler errors.	Passed
2. Race conditions and Reentrancy. Cross-function race conditions.	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.	Passed
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.

No medium severity issues found.

- Low Severity Issues
  - 1. Out of gas

#### Issue:

- The function includeInReward() uses the loop to find and remove addresses from the \_excluded list. Function will be aborted with OUT\_OF\_GAS exception if there will be a long excluded addresses list.
- The function <u>getCurrentSupply</u> also uses the loop for evaluating total supply. It also could be aborted with <u>OUT\_OF\_GAS</u> exception if there will be a long excluded addresses list.

#### Recommendation:

Check that the excluded array length is not too big.

#### **Notes:**

- The function \_softBurnTokens() sends burn amount to burnAddress.
- FeeType.Antiwhale is not realized.

# Owner privileges (In the period when the owner is not renounced)

- Owner can change the maximum transaction amount.
- Owner can exclude from the fee.
- Manager can transfer manager to new address.
- Manager can change presale mode.
- Manager can change router.
- Manager can withdraw contract BNBs.
- Owner can lock and unlock. By the way, using these functions the owner could retake privileges even after the ownership was renounced.

### Conclusion

Smart contracts contain low severity issues! Liquidity pair contract's security is not checked due to out of scope.

Liquidity locking details NOT provided by the team.

#### 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.

