



# **Smart Contract Security Audit**

TechRate
June, 2021

## **Audit Details**



**Audited project** 

BongWeedCoin



Deployer address

0xf103d2AbA493749a402B7dE11cF31f5844062B74



**Client contacts:** 

BongWeedCoin team

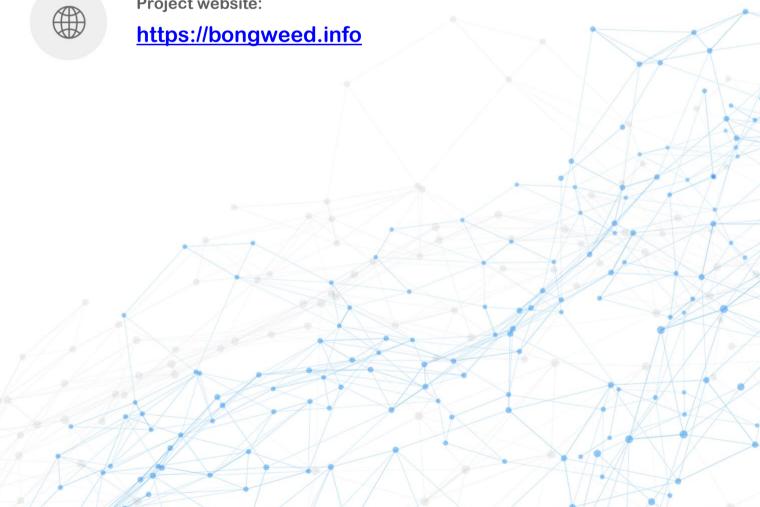


Blockchain

**Binance Smart Chain** 



Project website:



### **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 BongWeedCoin to perform an audit of smart contracts:

https://bscscan.com/address/0x66696ab8c6aaeb22dc14a2dc4a833682388ea901#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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## **Contracts Details**

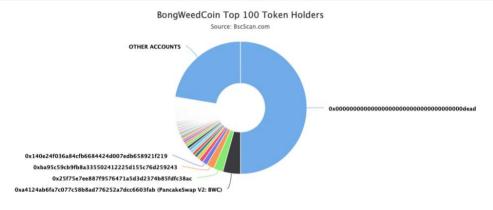
#### Token contract details for 11.06.2021

Contract name	BongWeedCoin
Contract address	0x66696AB8c6aAeb22dc14a2Dc4A833682388Ea901
Total supply	1,000,000,000,000
Token ticker	BWC
Decimals	9
Token holders	5,765
Transactions count	16,696
Top 100 holders dominance	77.63%
Liquidity fee	5
Tax fee	5
Total fees	168462242550319334665060
Uniswap V2 pair	0xa4124ab6fa7c077c58b8ad776252a7dcc6603fab
Contract deployer address	0xf103d2AbA493749a402B7dE11cF31f5844062B74
Contract's current owner address	0x000000000000000000000000000000000000

# BongWeedCoin Token Distribution

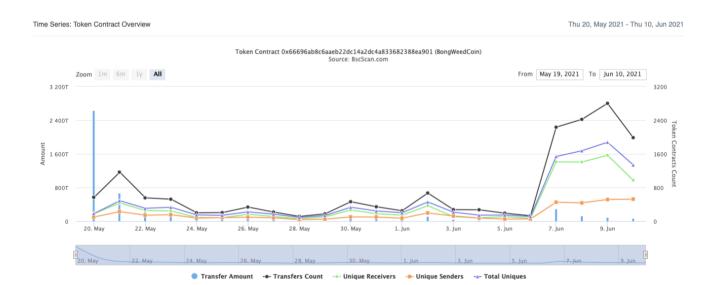


▼ Token Total Supply: 1,000,000,000,000,000.00 Token | Total Token Holders: 5,765



(A total of 776.329.546.604.128.00 tokens held by the top 100 accounts from the total supply of 1,000,000,000,000,000,000,000 token)

## BongWeedCoin Contract Interaction Details



# BongWeedCoin Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	0x000000000000000000000000000000000000	500,000,000,000,000	50.0000%
2	PancakeSwap V2: BWC	43,127,597,048,407.346695995	4.3128%
3	0x25f75e7ee887f9576471a5d3d2374b85fdfc38ac	23,228,831,983,982.411409278	2.3229%
4	0xba95c59cb9fb8a335502412225d155c76d259243	18,598,641,901,725.951086406	1.8599%
5	0x140e24f036a84cfb6684424d007edb658921f219	12,000,000,000,000	1.2000%
6	0x23e36488e2dbd8f711c05f299d3a574459156e12	10,287,321,987,787.810058611	1.0287%
7	0xbdf119001cf9d44d902bf7d8e283e10ab66ddeea	7,878,661,510,447.509341077	0.7879%
8	0xe4cf8689ea294fda1e71b899c789f7165709e735	7,496,735,870,687.633255768	0.7497%
9	0x3155f79424d475b4f4db0206acaf05e035e6100b	7,306,344,384,405.139348308	0.7306%
10	0x558fc21ce19344a5dd7273e58049fa0049cbf8c0	7,121,617,689,514.64850484	0.7122%

# BongWeedCoin Top 10 LP Token Holders

Rank	Address	Quantity	Percentage
1	0x000000000000000000000000000000000000	2,806.622078206397811246	68.9681%
2	₫ 0xeb3a9c56d963b971d320f889be2fb8b59853e449	1,179.830496300210065747	28.9924%
3	0x22057d5d267298089d25056cbef1c90fdd210c12	25.256229299214067892	0.6206%
4	0x07d80ae6f36a5e08dca74ce884a24d39db9934ed	19.196065865675716817	0.4717%
5	0xc2475b24ebbc1ee8b75325766f4b8f6b327320bd	14.396990281743433519	0.3538%
6	0x644efb7e89ebabd1d4a1e621566030bc0e0bd5f9	8.071882213311137887	0.1984%
7	0xacbffa8107c00767ac1c417038e86cd723c0b218	5.104273984112108478	0.1254%
8	0x2ae8cc8566bfa45cb5467a9cdde86103da8598d4	4.466820527110550019	0.1098%
9	0xc443c09a06a8097df0cb11fd8b31734fb92ad9fd	3.820146906310939639	0.0939%
10	0x3e42d423d168e66830a8bb61b221067b67fa83aa	0.816724009378280135	0.0201%

### **Contract functions details**

#### + [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 + Context - [Int] \_msgSender - [Int] \_msgData + [Lib] Address - [Int] isContract - [Int] sendValue # - [Int] functionCall # - [Int] functionCall # - [Int] functionCallWithValue # - [Int] functionCallWithValue # - [Prv] functionCallWithValue # + Ownable (Context) - [Pub] owner - [Pub] renounceOwnership # - modifiers: onlvOwner - [Pub] transferOwnership # - modifiers: onlyOwner - [Pub] geUnlockTime - [Pub] lock # - modifiers: onlyOwner - [Pub] unlock # + [Int] IUniswapV2Factory - [Ext] feeTo - [Ext] feeToSetter - [Ext] getPair - [Ext] allPairs - [Ext] allPairsLength - [Ext] createPair # - [Ext] setFeeTo#

- [Ext] setFeeToSetter #

#### + [Int] IUniswapV2Pair - [Ext] name - [Ext] symbol - [Ext] decimals - [Ext] totalSupply - [Ext] balanceOf - [Ext] allowance - [Ext] approve # - [Ext] transfer # - [Ext] transferFrom # - [Ext] DOMAIN SEPARATOR - [Ext] PERMIT\_TYPEHASH - [Ext] nonces - [Ext] permit # - [Ext] MINIMUM LIQUIDITY - [Ext] factory - [Ext] token0 - [Ext] token1 - [Ext] getReserves - [Ext] price0CumulativeLast - [Ext] price1CumulativeLast - [Ext] kLast - [Ext] mint # - **[Ext]** burn # - [Ext] swap # - [Ext] skim # - [Ext] sync # - [Ext] initialize # + [Int] IUniswapV2Router01 - [Ext] factory - [Ext] WETH - [Ext] addLiquidity # - [Ext] addLiquidityETH (\$) - [Ext] removeLiquidity # - [Ext] removeLiquidityETH # - [Ext] removeLiquidityWithPermit # - [Ext] removeLiquidityETHWithPermit # - [Ext] swapExactTokensForTokens # - [Ext] swapTokensForExactTokens # - [Ext] swapExactETHForTokens (\$) - [Ext] swapTokensForExactETH # - [Ext] swapExactTokensForETH # - [Ext] swapETHForExactTokens (\$) - [Ext] quote - [Ext] getAmountOut - [Ext] getAmountIn - [Ext] getAmountsOut - [Ext] getAmountsIn + [Int] IUniswapV2Router02 (IUniswapV2Router01) - [Ext] removeLiquidityETHSupportingFeeOnTransferTokens # - [Ext] removeLiquidityETHWithPermitSupportingFeeOnTransferTokens # - [Ext] swapExactTokensForTokensSupportingFeeOnTransferTokens #

- [Ext] swapExactETHForTokensSupportingFeeOnTransferTokens (\$)
- [Ext] swapExactTokensForETHSupportingFeeOnTransferTokens #
- + CoinToken (Context, IERC20, Ownable)
  - [Pub] <Constructor>#
  - [Pub] name
  - [Pub] symbol
  - [Pub] decimals
  - [Pub] totalSupply
  - [Pub] balanceOf
  - [Pub] transfer #
  - [Pub] allowance
  - [Pub] approve #
  - [Pub] transferFrom #
  - [Pub] increaseAllowance #
  - [Pub] decreaseAllowance #
  - [Pub] isExcludedFromReward
  - [Pub] totalFees
  - [Pub] deliver #
  - [Pub] reflectionFromToken
  - [Pub] tokenFromReflection
  - [Pub] excludeFromReward #
    - modifiers: onlyOwner
  - [Ext] includeInReward #
    - modifiers: onlyOwner
  - [Prv] \_transferBothExcluded #
  - [Pub] excludeFromFee #
  - modifiers: onlyOwner
  - [Pub] includeInFee #
  - modifiers: onlyOwner
  - [Ext] setTaxFeePercent #
    - modifiers: onlyOwner
  - [Ext] setLiquidityFeePercent #
    - modifiers: onlyOwner
  - [Pub] setNumTokensSellToAddToLiquidity #
  - modifiers: onlyOwner
  - [Pub] setMaxTxPercent #
    - modifiers: onlyOwner
  - [Pub] setSwapAndLiquifyEnabled #
    - modifiers: onlyOwner
  - [Ext] <Fallback> (\$)
  - [Prv] \_reflectFee #
  - [Prv] \_getValues
  - [Prv] \_getTValues
  - [Prv] \_getRValues
  - [Prv] \_getRate
  - [Prv] \_getCurrentSupply
  - [Prv] \_takeLiquidity #
  - [Pub] claimTokens #
    - modifiers: onlyOwner
  - [Prv] calculateTaxFee
  - [Prv] calculateLiquidityFee
  - [Prv] removeAllFee #
  - [Prv] restoreAllFee #
  - [Pub] isExcludedFromFee

- [Prv] \_approve #
- [Prv] \_transfer #
- [Prv] swapAndLiquify #
  - modifiers: lockTheSwap
- [Prv] swapTokensForEth #
- [Prv] addLiquidity #
- [Prv] \_tokenTransfer #
- [Prv] \_transferStandard #
- [Prv] \_transferToExcluded #
- [Prv] \_transferFromExcluded #
- (\$) = 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.

Medium Severity Issues

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.

```
function includeInReward(address account1) external onlyOwner() {
    require(_isExcluded[account1], "Account is already excluded");
    for (uint256 i = 0; i < _excluded.length; i++) {
        if (_excluded[i] == account1) {
            excluded[i] = [excluded.length - 1];
            tOwned[account1] = 0;
            isExcluded[account1] = false;
            excluded.pop();
            break;
    }
}</pre>
```

 The function \_getCurrentSupply also uses the loop for evaluating total supply. It also could be aborted with OUT\_OF\_GAS exception if there will be a long excluded addresses list.

#### Recommendation:

Check that the excluded array length is not too big.

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

Owner can change the tax and liquidity fee.

```
function setTaxFeePercent(uint256 taxFee) external onlyOwner() {
    _taxFee = taxFee;
}

function setLiquidityFeePercent(uint256 liquidityFee) external onlyOwner() {
    _liquidityFee = liquidityFee;
}
```

Owner can change the maximum transaction amount.

Owner can exclude from the fee.

```
function excludeFromFee(address account1) public onlyOwner {
    _isExcludedFromFee[account1] = true;
}
```

Owner can claim all tokens from contract balance.

```
ftrace|funcSig
function claimTokens() public onlyOwner {
         payable(_owner).transfer(address(this).balance);
}
```

Owner can change numTokensSellToAddToLiquidity.

```
ftrace|funcSig
function setNumTokensSellToAddToLiquidity(uint256 swapNumber1) public onlyOwner {
    numTokensSellToAddToLiquidity = swapNumber1 * 10 ** _decimals;
}
```

 Owner can lock and unlock. By the way, using these functions the owner could leave as owner even after the ownership was renounced.

```
//Locks the contract for owner for the amount of time provided
function lock(uint256 time) public virtual onlyOwner {
    _previousOwner = _owner;
    _owner = address(0);
    _lockTime = now + time;
    emit OwnershipTransferred(_owner, address(0));
}

//Unlocks the contract for owner when _lockTime is exceeds
function unlock() public virtual {
    require(_previousOwner == msg.sender, "You don't have permission to unlock");
    require(now > _lockTime , "Contract is locked until 7 days");
    emit OwnershipTransferred(_owner, _previousOwner);
    _owner = _previousOwner;
}
```

#### Conclusion

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

Liquidity locking details provided by the team: https://dxsale.app/app/pages/dxlockview?id=0&add=0x23238A34C5 4E115a4bC0b39729165e9c791De532&type=lplock&chain=BSC

Ownership renounce details provided by the team: https://bscscan.com/tx/0xa245b5b29e519bf04236c7c81e8a93fbdfe d07dd23d4fc328bca738dff2b3405#eventlog

#### 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.

