TechRate

AUDIT COMPANY

Smart Contract Security Audit

TechRate

December, 2021

Audit Details

Audited project

BLACK PHOENIX

Deployer address

TK45JzcFMRaysBzdtmWkhoF1sR2TbtE5LS

Client contacts:

BLACK PHOENIX team

Blockchain

TRON

Project website:

Blackphoenixbpx.com

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 BLACK PHOENIX to perform an audit of smart contracts:
https://tronscan.io/#/token20/TXBcx59eDVndV5upFQnTR2xdvqFd5reXET/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.

Contracts Details

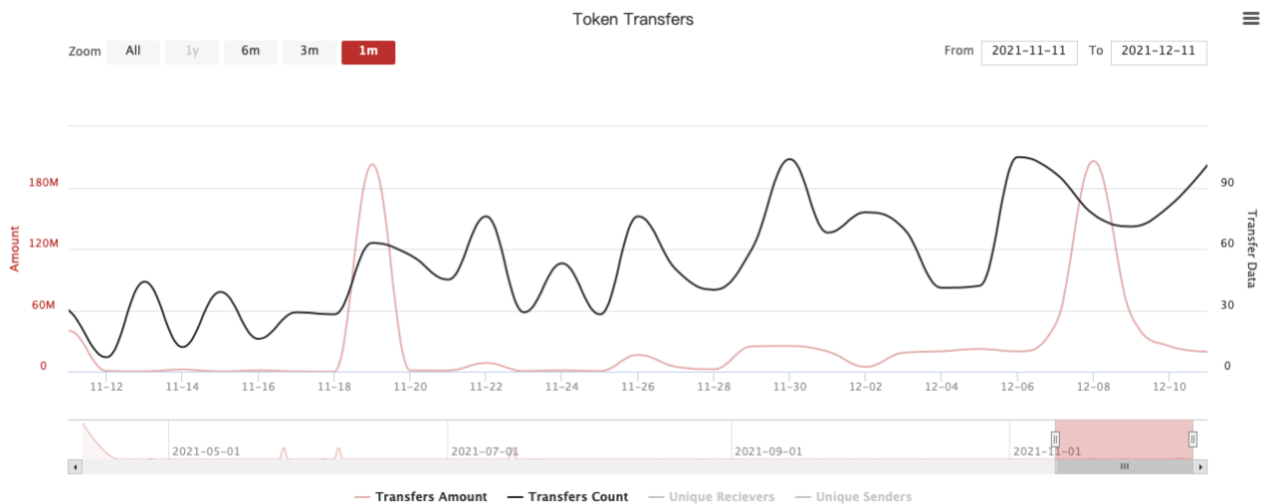## Token contract details for 12.12.2021

Contract name	**BLACK PHOENIX**
Contract address	**TXBcx59eDVndV5upFQnTR2xdvqFd5reXET**
Total supply	**4,000,000,000.00000**
Token ticker	**BPX**
Decimals	**18**
Token holders	**6,058**
Transactions count	**11,920**
Top 10 holders dominance	**95.55%**
Contract deployer address	**TK45JzcFMRaysBzdtmWkhoF1sR2TbtE5LS**

BLACK PHOENIX Token Distribution

Asset Breakdown by Holders

■ Top 1~10 holders:95.55%　■ Top 11~50 holders:2.67%　■ Top 51~100 holders:0.84%　■ Top 101~500 holders:0.91%　■ Top 501~∞ holders:0.03%

BLACK PHOENIX Contract Interaction Details

Token Transfers

Zoom All 1y 6m 3m 1m

From 2021-11-11 To 2021-12-11

Transfers Amount —— Transfers Count —— Unique Recievers —— Unique Senders

BLACK PHOENIX Top 10 Token Holders

Rank	Address		Quantity	Percentage
1	THRxrUEFrxTJH9E2gHMtPHgR93whSVUkfc		2,510,000,000	62.75%
2	TN2T9sFauRosHcu41hF1baEL8kg8ZsRkBD		890,134,304.864045995564998818	22.253358%
3	TYyiYD6PD38gtsDHh9QYQPDnfZyQ6FSAPR	Bitrue	190,248,260.633457500496018122	4.756207%
4	TKqbA13zUknWqS8eEaqwaJYsKSn1DRB4F4		107,680,273.795186723429422989	2.692007%
5	TZAPUkTmFGPYwbWFpQ8Sf6RMij1Wtp8K1N	XT.COM	47,505,478.043806497146371758	1.187637%
6	TNzj7EeWv7rBopM85ErKKTe5HabZehZEdP		22,960,157.29350613	0.574004%
7	TANCmoL5mav6jk9B8Bk8UG2Nwce5BfCbWL		19,401,998	0.48505%
8	TBTNPPCZUNN1CeGvKZ5U6oDNmBVAxVEX9h		14,005,000	0.350125%
9	TMuA6YqfCeX8EhbfYEg5y7S4DqzSJireY9	◈ Binance-Cold 1	10,000,000	0.25%
10	TDVe2pmMSQUVwA2NAFwFfj9yFcHXd6wJie		10,000,000	0.25%

Contract functions details

+ **ERC20** (IERC20)
 - **[Pub]** totalSupply
 - **[Pub]** balanceOf
 - **[Pub]** transfer **#**
 - **[Pub]** allowance
 - **[Pub]** approve **#**
 - **[Pub]** transferFrom **#**
 - **[Pub]** increaseAllowance **#**
 - **[Pub]** decreaseAllowance **#**
 - [Int] _transfer **#**
 - [Int] _mint **#**
 - [Int] _burn **#**
 - [Int] _approve **#**
 - [Int] _burnFrom **#**

+ **ERC20Detailed** (IERC20)
 - **[Pub]** <Constructor> **#**
 - **[Pub]** name
 - **[Pub]** symbol
 - **[Pub]** decimals

+ **[Int]** IERC20
 - **[Ext]** totalSupply
 - **[Ext]** balanceOf
 - **[Ext]** transfer **#**
 - **[Ext]** allowance
 - **[Ext]** approve **#**
 - **[Ext]** transferFrom **#**

+ **[Lib]** SafeMath
 - [Int] add
 - [Int] sub
 - [Int] mul
 - [Int] div
 - [Int] mod

+ **Token** (ERC20, ERC20Detailed)
 - **[Pub]** <Constructor> **#**
   - modifiers: ERC20Detailed

($) = 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.	Passed
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

No low severity issues found.

Conclusion

Smart contracts do not contain high severity issues!

Liquidity locking details provided by the team:
https://tronscan.io/#/transaction/e4c2e4659fdf1d2a5284f1a2787ccf
a90ebaef89ae67f0d1062548fb85b8c6d0?lang=en

https://tronscan.io/#/transaction/7f5cc71d299fbb2f902a1fbf7d2a58
880170e476018ae8c365dde48bb38625a3?lang=en

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.