



Smart Contract Security Audit

Audit details:

Audited project:	Solarfare
Deployer address:	0x8e9407c817ba4ed79d1b68f55aada6b08abe2b2a
Client contacts:	Solarfare team
Blockchain:	Binance Smart Chain
Project website:	Not provided

May, 2021
TechRate

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 Solarfare to perform an audit of smart contracts:

- <https://bscscan.com/address/0xcF11B7C8968063B4A31BF0153Ebd42aD570c72e2#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 05.05.2021.

Contract name:	Solarfare
Contract address:	0xcF11B7C8968063B4A31BF0153Ebd42aD570c72e2
Total supply:	1_000_000_000_000_000_000_000_000
Token ticker:	SLF
Decimals:	18
Token holders:	1
Transactions count:	1
Top 100 holders dominance:	100 %
Staking address:	0x9e05ef535922eb8a0b7e48a6a5858baf5fdc38b3
Bnb to charity:	0
Charity address:	0x8b99f3660622e21f2910ecca7fbe51d654a1517d
Compiler version:	v0.8.4+commit.c7e474f2
Total swapped:	0
Uniswap V2 pair:	0xac46e77a95ef7feb0262f063dccef8246b41b1ca
Contract deployer address:	0x8e9407c817ba4ed79d1b68f55aada6b08abe2b2a
Contract's current owner address:	0x8e9407c817ba4ed79d1b68f55aada6b08abe2b2a

Solarfare token distribution



Contract functions details

- + [Int] IStaking
 - [Ext] distribute (\$)

- + Solarfare (BaseERC20)
 - [Pub] <Constructor> #
 - modifiers: BaseERC20
 - [Int] _transfer #
 - [Prv] _feeTransfer #
 - [Prv] _noFeeTransfer #
 - [Prv] _isWhitelisted
 - [Ext] <Fallback> (\$)
 - [Prv] _swap #
 - [Prv] swapTokensForEth #
 - [Prv] addLiquidity #
 - [Ext] setStakingAddress #
 - modifiers: onlyOwner
 - [Ext] updateWhitelist #
 - modifiers: onlyOwner

(\$) = 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.

Owner privileges

- ☐ Owner can change the staking address.
- ☐ Owner can change the whitelisted status of any address.

Conclusion

Smart contracts do not contain high severity issues. LP pair contract's security is not checked.

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.