

## **\_review**

### **Arsenic Coin (Arsenic Finance)**

Avalanche | Feb'22

Audited by: Vivek Tiwari (@arimanyus)

## Disclaimer

This document contains our findings for the basic screening/review of a cryptographic asset. This is not a full-fledged or comprehensive audit where in-depth vulnerabilities are found and/or corrected. A screen audit consists of a manual screening of the project's codebase, structure, and functionalities. It's a good starting point for a comprehensive audit, but not a replacement for the same.

Aphelion Labs' security reports should not be considered either an endorsement or blatant disapproval of a project, cryptocurrency, or protocol surveyed. It is a limited report presented after the analysis of the asset submitted for review.

This report should, in no way, be used for making decisions around investments or involvement in the project. This report is provided for information purposes only and on a non-reliance basis, and does not constitute investment advice. No party shall have any right to rely on the report or its contents, and Aphelion Labs and its affiliates (including holding companies, shareholders, subsidiaries, employees, directors, officers and other representatives) owe no duty of care towards you or any other person or party, nor does Aphelion Labs make any warranty or representation to any person on the accuracy or completeness of the report.

Any action you take upon the information you find on this report, is strictly at your own risk. Aphelion Labs will not be liable for any losses and/or damages in connection with the use of our report, summary or findings.

For any projects that are presented to us for review or audit we assume: The information provided is not missing, tampered with, deleted or concealed. If the information provided is missing, tampered with, deleted, concealed, or inconsistent with the actual situation, Aphelion Labs shall not be liable for any loss or adverse effect resulting therefrom. Aphelion Labs only conducts the agreed security audit on the security situation of the project and issues this report. Aphelion Labs is not responsible for the background and other conditions of the project.

# Contents

Disclaimer.....	2
Contents.....	3
Executive Summary.....	4
Audit Details.....	5
Contract Details .....	6
Token distribution.....	7
Contract interaction overview .....	7
Top 10 holders .....	8
Top 10 Holders' Analysis.....	8
Contract Structure .....	9
Contract Interaction.....	11
Issues Checking Summary .....	12
Issue(s) Analysis .....	13
1. High-severity issues.....	13
a. Contract Renunciation .....	13
2. Medium-severity issues .....	13
a. RugCheck.....	13
Conclusion.....	14

## Executive Summary

On Feb 23, 2022, the Aphelion Labs security team received a private request to review Arsenic Finance's Arsenic Coin (contract) on Avalanche C-Chain, developed the basic review plan according to the agreement of both parties and the characteristics of the project, and finally issued the review summary.

The address of the reviewed smart contract on Feb 23<sup>rd</sup>, 2022, was:

**0x7Fa9507c54B4Aa11518859dF9928629Af62963DC**

The objective of this screen audit was to:

1. General review of token and distribution.
2. Contract interaction, holders' analysis.

## Audit Details

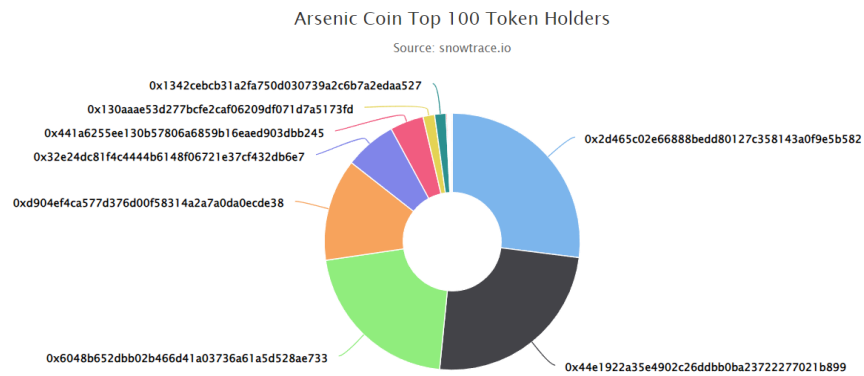
<b>Project name</b>	Arsenic Coin
<b>Review type</b>	Grade-C Basic Review
<b>Deployer</b>	0x44e1922a35e4902c26ddbb0ba23722277021b899
<b>Client contact</b>	Project stakeholder
<b>Blockchain</b>	Avalanche C-Chain
<b>Audited by</b>	@arimanyus
<b>Codebase</b>	Not provided

## Contract Details

Token contract details as on February 23<sup>rd</sup>, 2022.

<b>Contract name</b>	Arsenic Coin
<b>Contract address</b>	0x7Fa9507c54B4Aa11518859dF9928629Af62963DC
<b>Contract ticker</b>	AR
<b>Total supply</b>	13650785411764705881493
<b>Client contact</b>	Project stakeholder
<b>Decimals</b>	18
<b>Token holders</b>	65
<b>Transactions count</b>	3613
<b>Liquidity Pool</b>	4041.65 (~\$4600)
<b>Blockchain</b>	Avalanche C-Chain















## Token distribution



## Contract interaction overview

- No details found -

## Top 10 holders

Rank	Address	Quantity	Percentage	
1	 0x2d465c02e66888bedd80127c358143a0f9e5b582	4,079.320026110085610627	27.1319%	
2	 0x44e1922a35e4902c26ddb0ba2372277021b899	3,698.822285108946162595	24.6011%	
3	 0x6048b652dbb02b466d41a03736a61a5d528ae733	3,159.63481133333333344	21.0150%	
4	0xd904ef4ca577d376d00f58314a2a7a0da0ecde38	1,929	12.8299%	
5	 0x32e24dc81f4c4444b6148106721e37cf432db6e7	978.657725301308497919	6.5091%	
6	0x441a6255ee130b57806a6859b16eae903dbb245	639.560352941176470104	4.2538%	
7	0x130aae53d277bce2caf06209df071d7a5173fd	220.151875237339955295	1.4642%	
8	0x1342cebc31a2fa750d030739a2c6b7a2edaa527	215.70279782503697074	1.4347%	
9	0x58b80ff10946cda425c81f8619c6c1615a517b5	26.071707230378393764	0.1734%	
10	0x62b077626927469e20dba4922c38a6e035068f9a	11.753538666666666666	0.0782%	

## Top 10 Holders' Analysis

**Overview:** none of the top 10 holders are blacklisted by Aphelion Labs or were found to have made any suspicious activities in the past.

**Activity analysis:** the nature of the top 10 accounts was found to be mostly *organic* and no suspicious activity in the past was observed.

**Whale spotting:** 4 wallets (individual wallets holding 1%+ of the total token supply) were found among the top token holders.

**Score:** 6/10



## Contract Structure

```

| **Achilles** | Implementation | Context, IERC20, Ownable |||
|  | <Constructor> | Public ! | * | NO ! |
|  | name | Public ! | | NO ! |
|  | symbol | Public ! | | NO ! |
|  | decimals | Public ! | | NO ! |
|  | totalSupply | Public ! | | NO ! |
|  | balanceOf | Public ! | | NO ! |
|  | transfer | Public ! | * | NO ! |
|  | allowance | Public ! | | NO ! |
|  | approve | Public ! | * | NO ! |
|  | transferFrom | Public ! | * | NO ! |
|  | increaseAllowance | Public ! | * | NO ! |
|  | decreaseAllowance | Public ! | * | NO ! |
|  | isExcludedFromReward | Public ! | | NO ! |
|  | totalFees | Public ! | | NO ! |
|  | totalBurn | Public ! | | NO ! |
|  | deliver | Public ! | * | NO ! |
|  | reflectionFromToken | Public ! | | NO ! |
|  | tokenFromReflection | Public ! | | NO ! |
|  | excludeFromReward | Public ! | * | onlyOwner |
|  | includeInReward | External ! | * | onlyOwner |
|  | _approve | Private 🔒 | * | |
|  | _transfer | Private 🔒 | * | |
|  | swapAndLiquify | Private 🔒 | * | lockTheSwap |
|  | swapTokensForEth | Private 🔒 | * | |
|  | addLiquidity | Private 🔒 | * | |
|  | burnLpTokens | Private 🔒 | * | |
|  | lpTokenBalance | Public ! | | NO ! |
|  | withdrawLpTokens | Public ! | * | onlyOwner |
|  | _tokenTransfer | Private 🔒 | * | |
|  | _transferStandard | Private 🔒 | * | |
|  | _transferToExcluded | Private 🔒 | * | |
|  | _transferFromExcluded | Private 🔒 | * | |
|  | _transferBothExcluded | Private 🔒 | * | |
|  | _reflectFee | Private 🔒 | * | |
|  | _getValues | Private 🔒 | | |
|  | _getTValues | Private 🔒 | | |
|  | _getRValues | Private 🔒 | | |

```

```

| L | _getRate | Private 🔒 | | |
| L | _getCurrentSupply | Private 🔒 | | |
| L | _takeLiquidity | Private 🔒 | * | |
| L | _rewardLiquidityProviders | Private 🔒 | * | |
| L | calculateTaxFee | Private 🔒 | | |
| L | calculateBurnFee | Private 🔒 | | |
| L | calculateLiquidityFee | Private 🔒 | | |
| L | removeAllFee | Private 🔒 | * | |
| L | restoreAllFee | Private 🔒 | * | |
| L | isExcludedFromFee | Public ! | | NO ! |
| L | excludeFromFee | Public ! | * | onlyOwner |
| L | includeInFee | Public ! | * | onlyOwner |
| L | setTaxFeePercent | External ! | * | onlyOwner |
| L | setBurnFeePercent | External ! | * | onlyOwner |
| L | setLiquidityFeePercent | External ! | * | onlyOwner |
| L | setLpRewardFromLiquidityPercent | External ! | * | onlyOwner |
| L | setMaxTxPercent | External ! | * | onlyOwner |
| L | setBurnLpTokenEnabled | External ! | * | onlyOwner |
| L | setSwapAndLiquifyEnabled | Public ! | * | onlyOwner |
| L | <Receive Ether> | External ! | $ NO ! |

```

#### Legend

```

| Symbol | Meaning |
|:-----:|:-----:|
| * | Function can modify state |
| $ | Function is payable |

```

## Contract Interaction



## Issues Checking Summary

<b>Contract Verification</b>	Passed
<b>RugCheck</b>	Minor issues
<b>Holders' Analysis</b>	Passed
<b>Liquidity Pool Check</b>	Passed
<b>Honeypot Check</b>	Passed
<b>Doxx Check</b>	Not Doxxed
<b>Contract Renunciation</b>	Not Renounced
<b>Fallback function security</b>	Not in scope of review/audit
<b>Exchange rate logic impact</b>	Not in scope of review/audit
<b>Variable check</b>	Not in scope of review/audit
<b>MythX</b>	Not in scope of review/audit
<b>Slyther</b>	Not in scope of review/audit
<b>Solhint</b>	Not in scope of review/audit
<b>Suspicious library check</b>	Not in scope of review/audit

## Issue(s) Analysis

### 1. High-severity issues

#### a. Contract Renunciation

The contract has not been renounced yet (23<sup>rd</sup> Feb, 2022), which means that the contract owner has rights to change the contract's functionality at any point of time.

Even though there could be legitimate reasons as to why a project's dev team might not want to renounce contract (testing, deployment, etc), such contracts are generally not considered safe unless reasons behind not renouncing the contract are specifically mentioned.

**Suggestion:** A contract should be renounced for transparency and better trust with the community. If not, the reason should be specifically mentioned.

### 2. Medium-severity issues

#### a. RugCheck

Our team found multiple issues with RugCheck v1.0 on the contract:

- i. Mint Function missing.
- ii. Close similarity with other tokens on several EVM-compatible chains.
- iii. Creator wallet holds nearly a quarter of all supply.

### 3. Low-severity issues

#### a. Doxx Check

The identity of the team behind the contract is not known (known as doxing). A team may have legitimate reason not to disclose their identities. This does not have any impact on the code functionality whatsoever.

## Conclusion

Aphelion Labs concludes the basic review of the contract.

**Closing notes from Aphelion Labs:** we do not make any warranties on the financial instruments associated with this project, neither do we “approve” or “reject” the code-sustainability, quality of the contract or investment attractiveness.

# धन्यवाद

## thank you

*exclamation*

exclamation: **thank you**; exclamation: **thankyou**

a polite expression used when acknowledging a gift, service, or compliment, or accepting or refusing an offer.

"**thank you** for your letter"

*noun*

noun: **thank you**; plural noun: **thank yous**; noun: **thankyou**; plural noun: **thanky**  
**thank-you**

an instance or means of expressing thanks.

"Lucy planned a party as a thank you to hospital staff"



[github.com/aphelionlabs](https://github.com/aphelionlabs)



[aphelion.in](https://aphelion.in)



[hi@aphelion.in](mailto:hi@aphelion.in)

**aphelion**  
**labs** 