

Draft Security Assessment for

56-2021-11-yaxis (1New-FD)

July 23, 2023



Executive Summary

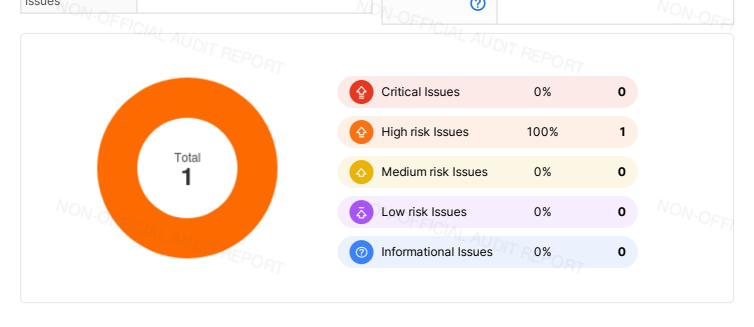
Overview	No PIAL AUDIT -
Project Name	56-2021-11-yaxis (1New-FD)
Codebase URL	https://github.com/code-423n4/2021- 11-yaxis
Scan Engine	Al Analyzer
Scan Time	2023/07/23 22:55:25
Commit Id	bb9fb99

Total		Λ/ε
Critical Issues	PIAL AUDIT REPORT	
High risk Issues	TEPORT	
Medium risk Issues	0	
Low risk Issues	0	
Informational Issues	0	Ne

Critical Issues	The issue can cause large economic losses, large-scale data disorder, loss of control of authority management, failure of key functions, or indirectly affect the correct operation of other smart contracts interacting with it.
High Risk Issues	The issue puts a large number of users' sensitive information at risk or is reasonably likely to lead to catastrophic impacts on clients' reputations or serious financial implications for clients and users.
Medium Risk Issues	The issue puts a subset of users' sensitive information at risk, would be detrimental to the client's reputation if exploited, or is reasonably likely to lead to moderate financial impact.
Low Risk Issues	The risk is relatively small and could not be exploited on a recurring basis, or is a risk that the client has indicated is low-impact in view of the client's business circumstances.
	The issue does not pose an

immediate risk but is relevant to security best practices or Defence

in Depth.



Informational Issue

3



Summary of Findings

MetaScan security assessment was performed on July 23, 2023 22:55:25 on project 56-2021-11-yaxis (1New-FD) with the repository https://github.com/code-423n4/2021-11-yaxis on branch default branch. The assessment was carried out by scanning the project's codebase using the scan engine Al Analyzer. There are in total 1 vulnerabilities / security risks discovered during the scanning session, among which 0 critical vulnerabilities, 1 high risk vulnerabilities, 0 medium risk vulnerabilities, 0 low risk vulnerabilities, 0 informational issues.

ID	Description		Severity
MSA-001	MWE-204: Unsafe First Deposit		High risk
	OF FICIAL AUDIT REPORT	OFFICIAL AUDIT REPORT	



Findings



Critical (0)

No Critical vulnerabilities found here TCIAL AUDIT REPORT



High risk (1)

1. MWE-204: Unsafe First Deposit



High risk



Security Analyzer

First depositor can break minting of shares or drain the liquidity of all users.

File(s) Affected

contracts/v3/alchemix/mocks/YearnVaultMock.sol #51-64

```
function deposit(uint256 _amount) external returns (uint256) {
   uint256 _before = token.balanceOf(address(this));
   token.safeTransferFrom(msg.sender, address(this), _amount);
   uint256 _after = token.balanceOf(address(this));
   _amount = _after.sub(_before); // Additional check for deflationary tokens
   uint256 _shares = 0;
    if (totalSupply() == 0) {
       _shares = _amount;
    } else {
        _shares = (_amount.mul(totalSupply())).div(_pool);
                                              div...
V-OFFICIAL AUDIT REF
    _mint(msg.sender, _shares);
```

Recommendation

When totalSupply() == 0, send the first min liquidity LP tokens to the zero address to enable share dilution.



Medium risk (0)

No Medium risk vulnerabilities found here DIAL AUDIT REPORT



Low risk (0)

No Low risk vulnerabilities found here



Informational (0)

No Informational vulnerabilities found here IAL AUDIT REPORT



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