Assure DeFi®

THE VERIFICATION **GOLD STANDARD**

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INTEGRITY ✦ TRUST ✦ CREDIBILITY

Security Assessment

NovaQ

Date: 24/05/2025

Audit Status: PASS

Audit Edition: Advanced

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Risk Analysis

Vulnerability summary

Classification	Description
🔴 High	High-level vulnerabilities can result in the loss of assets or manipulation of data.
🟠 Medium	Medium-level vulnerabilities can be challenging to exploit, but they still have a considerable impact on smart contract execution, such as allowing public access to critical functions.
🟡 Low	Low-level vulnerabilities are primarily associated with outdated or unused code snippets that generally do not significantly impact execution, sometimes they can be ignored.
🟢 Informational	Informational vulnerabilities, code style violations, and informational statements do not affect smart contract execution and can typically be disregarded.

Executive Summary

According to the Assure assessment, the Customer's smart contract is **Secured.**

Insecure	Poorly Secured	**Secured**	Well Secured

Scope

Target Code And Revision

For this audit, we performed research, investigation, and review of the NovaQ contracts followed by issue reporting, along with mitigation and remediation instructions outlined in this report.

Target Code And Revision

Project	Assure
Language	Solidity
Codebase	NovaQ.sol: https://etherscan.io/address/0xf2b733bdddb8e12f0b3e15781b319389d499dad6#code
Audit Methodology	Static, Manual

Attacks made to the contract

In order to check for the security of the contract, we tested several attacks in order to make sure that the contract is secure and follows best practices.

Category	Item
Code review & Functional Review	● Compiler warnings. ● Race conditions and Reentrancy. Cross-function race conditions. ● Possible delays in data delivery. ● Oracle calls. ● Front running. ● Timestamp dependence. ● Integer Overflow and Underflow. ● DoS with Revert. ● DoS with block gas limit. ● Methods execution permissions. ● Economy model. ● Private user data leaks. ● Malicious Event log. ● Scoping and Declarations. ● Uninitialized storage pointers. ● Arithmetic accuracy. ● Design Logic. ● Cross-function race conditions. ● Safe Zeppelin module. ● Fallback function security. ● Overpowered functions / Owner privileges

AUDIT OVERVIEW

HIGH

No high severity issues were found.

MEDIUM

1. Dead Transfer-Tax Branch

Issue: _transferTax remains at 0; the if (_buyCount > 0) branch always applies 0% tax, so that branch is effectively dead.

Recommendation: Either remove the unused _transferTax variable and branch or add a bounded setter; document intended behavior in NatSpec.

LOW

1. SafeMath Gas Overhead

Issue: Using SafeMath under Solidity 0.8+ duplicates built-in overflow checks, costing extra gas.

Recommendation: Remove SafeMath imports; for critical loops, use unchecked {} after verifying safety.

2. Zero-Slippage Swap Risk

Issue: Uses amountOutMin = 0, allowing MEV bots to extract value via sandwich attacks during automated swaps.

Recommendation: Introduce a configurable slippageTolerance and compute amountOutMin from on-chain price or an oracle; revert if slippage exceeded.

INFORMATIONAL

1. Immutable Tax Wallet

Issue: _taxWallet is hardcoded to a fixed address and cannot be updated—if its key is lost, fee withdrawals become impossible.

Recommendation: Add a restricted mechanism (e.g. time-locked multisig) to update _taxWallet, emitting an event when changed.

2. Missing Transparency Events

Issue: Critical state changes (limits updates, bot updates, fee/tax swaps) lack dedicated events, hindering off-chain monitoring and transparency.

Recommendation: Emit events such as LimitsChanged, BotAdded/BotRemoved, FeesUpdated, and TokensSwappedForETH with relevant parameters.

Technical Findings Summary

Findings

Vulnerability Level	Total	Pending	Not Apply	Acknowledged	Partially Fixed	Fixed
🔴 High	0					
🟠 Medium	1					
🟡 Low	2					
🟢 Informational	2					

Assessment Results

Score Results

Review	Score
Global Score	**85/100**
Assure KYC	Not completed
Audit Score	85/100

The Following Score System Has been Added to this page to help understand the value of the audit, the maximum score is 100, however to attain that value the project must pass and provide all the data needed for the assessment. Our Passing Score has been changed to 84 Points for a higher standard, if a project does not attain 85% is an automatic failure. Read our notes and final assessment below. The Global Score is a combination of the evaluations obtained between having or not having KYC and the type of contract audited together with its manual audit.

Audit PASS

Following our comprehensive security audit of the token contract for the NovaQ project, we inform you that the project has met the necessary security standards.

Disclaimer

Assure Defi has conducted an independent security assessment to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the reviewed code for the scope of this assessment. This report does not constitute agreement, acceptance, or advocating for the Project, and users relying on this report should not consider this as having any merit for financial adNovaQ in any shape, form, or nature. The contracts audited do not account for any economic developments that the Project in question may pursue, and the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude, and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are entirely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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