

*Swift, Accurate, Secure*

SMART CONTRACT AUDIT

+ Project Analysis

PROJECT NAME:	KEYSWAP
TOKEN ADDRESS:	0x07b1681C082039551952bDee4A505cecC2FF4998
TOKEN WEBSITE:	https://keyswap.exchange/
TELEGRAM:	https://t.me/keyswap_chat
TWITTER:	https://twitter.com/keyswap_dex



KEYSWAP HAS **PASSED** THE AUDIT WITH A HIGH SCORE OF **97%** AND IS CONSIDERED **SAFE** FROM A SECURITY STANDPOINT - **PLEASE SEE FULL REPORT BELOW.**

VULNERABILITIES DETECTED

CRITICAL	MAJOR	MEDIUM	MINOR	INFORMATIONAL
0	0	0	0	0

PLEASE READ BELOW FOR THOROUGH REPORT

THIS DOCUMENT CERTIFIES THE SMART CONTRACT ABOVE AS AUDITED BY RHINOAUDITING.COM

PROJECT OVERVIEW

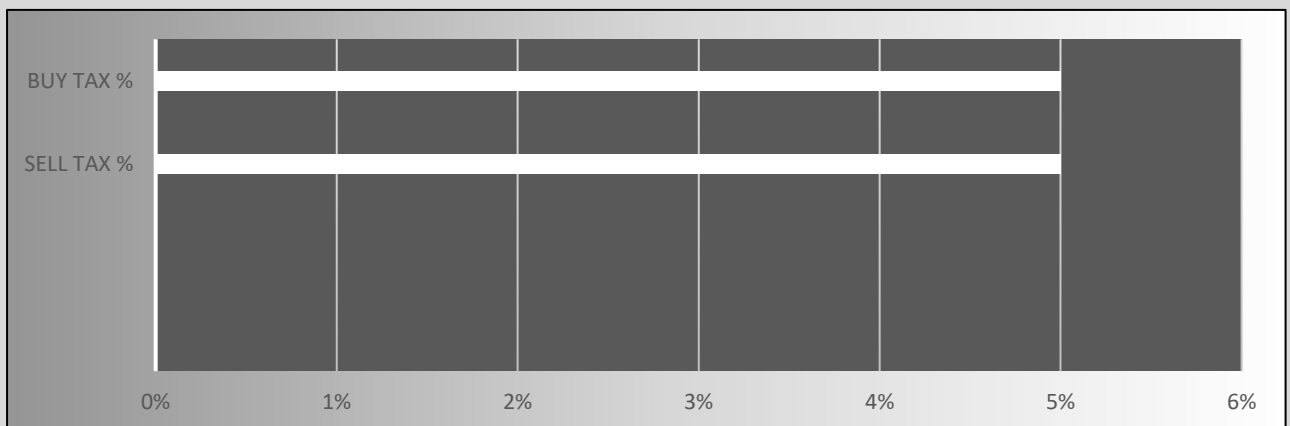
RHINO AUDITING HAS AUDITED **KEYSWAP** ON THE 05TH OF MARCH 2022 AND CONDUCTED A SMART CONTRACT CODE REVIEW AND SECURITY ANALYSIS. THIS REPORT PRESENTS THE FINDINGS AND VULNERABILITIES TOGETHER WITH SUGGESTIONS ON HOW TO FIX SAID VULNERABILITIES. A SCORE WILL BE PRESENTED TO THE PROJECT BASED ON FINDINGS. THIS SCORE WILL DETERMINE IF THE PROJECT IS **SAFE** OR **UNSAFE**.

INTRODUCTION

ADVANCED DEFI ON BINANCE SMART CHAIN WITH NEW INTERESTING FEATURES. METAVERSE, NFTS, AND LAUNCHPAD ARE PROVIDED WITH NEW TYPES OF FARMS AND POOLS. START TO BOOST RIGHT NOW!

PROJECT NAME:	KEYSWAP
TOKEN TICKER:	KEY
TOKEN ADDRESS:	0x07b1681C082039551952bDee4A505cecC2FF4998
NETWORK:	Binance Smart Chain Contract
TOTAL SUPPLY:	20,000,000 KEY
DEV WALLET:	0x7ed93b1a7ab560a8672d40ab5d713dd610b51c3d
MARKETING WALLET:	0xfae0c9848538588c2d3cbba16a8ea9d23581ab6e
LIQUIDITY:	NO LIQUIDITY AT THE TIME OF THE AUDIT
LP PAIRING:	BNB + KEY
WEBSITE ADDRESS:	KEYSWAP.EXCHANGE

TOKENOMICS & TAX



AUDIT METHODOLOGY

THE SOURCE CODE OF THE CONTRACT AUDITED IS THE VERIFIED CONTRACT LOCATED ON BSCSCAN. THIS CONTRACT WHILE UNDER REVIEW BY RHINO AUDITING HAS WENT THROUGH A RIGOROUS ANALYSIS AND EVERY LINE OF CODE BOTH MANUALLY AND AUTOMATICALLY AUDITED.

THE FOLLOWING AUDITING METHODOLOGY IS BEING USED:

- ENSURING THE CONTRACT SOURCE MEETS THE NEEDS OF THE CLIENT AND THAT THERE ARE NO SECURITY VULNERABILITIES UNTURNED THAT MAY RESULT IN INVESTOR LOSS OR THE DISSOLVING OF THE PROJECT
- VERIFY CONTRACT FUNCTIONS SUCH AS MINT, LOCK, PAUSE, AND BLACKLIST – AND ESTABLISH WHO IS ALLOWED TO PERFORM THESE FUNCTIONS & IF THEY CAN BE EXPLOITED.
- TESTING THE SMART CONTRACT AGAINST VARIOUS ATTACK VECTORS, WITH VARIOUS DIFFICULTIES.
- CLASSIFICATION OF VULNERABILITIES FOUND, ALONGSIDE WITH SUGGESTIONS ON HOW TO FIX SAID VULNERABILITIES.
- SOCIAL MEDIA ANALYSIS TO ESTABLISH PROJECT SENTIMENT AND WEBSITE ANALYSIS & REVIEW
- ASSESSMENT OF THE CODE BASE, ALONGSIDE WITH GAS OPTIMIZATION TEST AND DEPLOYMENT ON OUR LOCAL TEST NETWORK FOR FURTHER ANALYSIS AFTER DEPLOYMENT
- INSPECTION OF LIQUIDITY AND ESTABLISHING IF IT IS LOCKED, HOW LONG IT IS LONG FOR, AND WHO HAS THE RIGHTS TO REMOVE LIQUIDITY
- AN IN-DEPTH REPORT PRESENTING ALL FINDINGS TO THE CLIENT AND TO HIS INVESTORS.



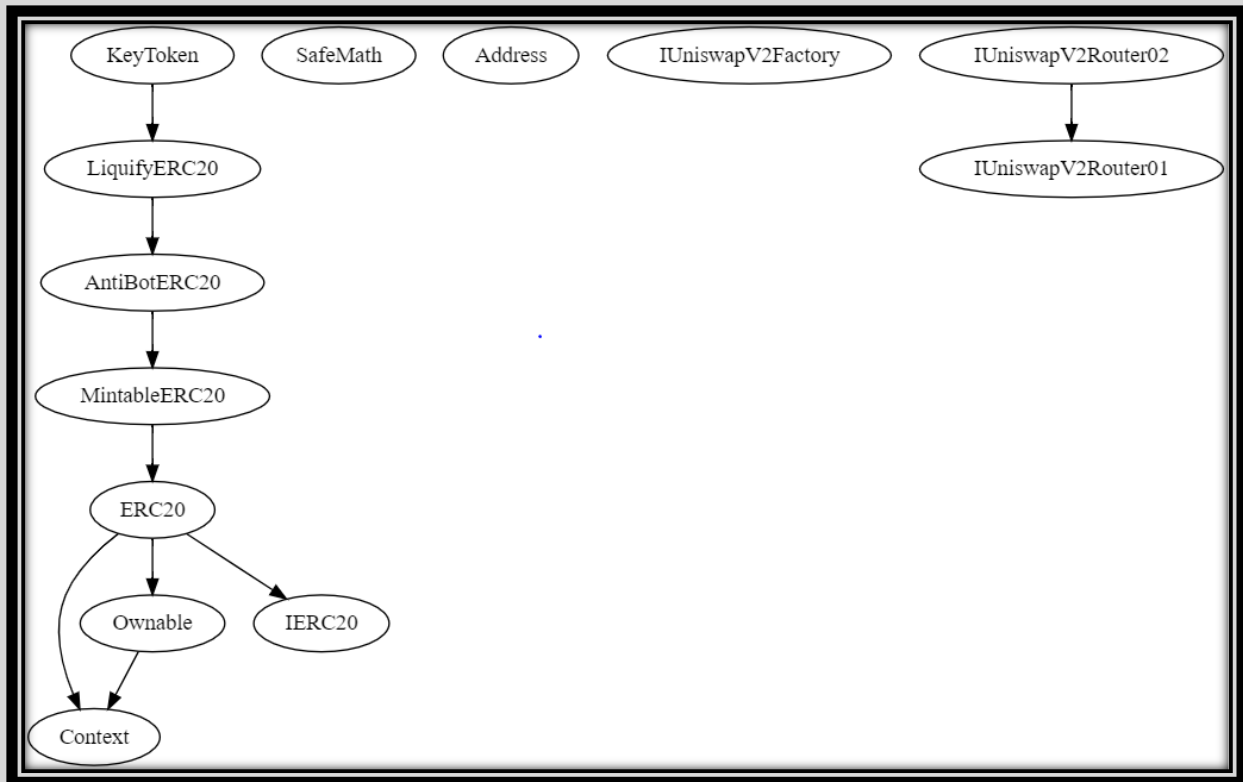
SECURITY ANALYSIS

CRITICAL	MAJOR	MEDIUM	MINOR	INFORMATIONAL
0	0	0	0	0
SWC VULNERABILITIES INSPECTED				STATUS
FUNCTION DEFAULT VISIBILITY				PASSED
INTEGER OVERFLOW AND UNDERFLOW				PASSED
OUTDATED COMPILER VERSION				PASSED
FLOATING PRAGMA				PASSED
UNCHECKED CALL RETURN VALUE				PASSED
UNPROTECTED ETHER/FUNDS WITHDRAWAL				PASSED
UNPROTECTED SELF DESTRUCT FUNCTION				PASSED
REENTRANCY				PASSED
STATE VARIABLE DEFAULT VISIBILITY				PASSED
ASSERT VIOLATION				PASSED
USE OF DEPRECATED SOLIDITY FUNCTIONS				PASSED
DELEGATECALL TO UNTRUSTED CALLEE				PASSED
DOS WITH FAILED CALL				PASSED
AUTHORIZATION THROUGH TX.ORIGIN				PASSED
BLOCK VALUES AS PROXY FOR TIME				PASSED
INCORRECT CONSTRUCTOR NAME				PASSED
SHADOWING STATE VARIABLES				PASSED
WEAK SOURCES OF RANDOMNESS FROM CHAIN				PASSED
REQUIREMENT VIOLATION				PASSED
INCORRECT INHERITANCE ORDERING				PASSED
PRESENCE OF UNUSED VARIABLES				PASSED
DOS WITH BLOCK GAS LIMIT				PASSED
TYPOGRAPHICAL ERRORS				PASSED
CODE WITH NO FUNCTIONS				PASSED
UNCRYPTED PRIVATE DATA ON BLOCKCHAIN				PASSED



**THE SMART CONTRACT HAS PASSED ALL
VULNERABILITY CHECKS – NO CONCERNS**

INHERITANCE GRAPH



OWNER PRIVILEGES

OWNER CAN BLACKLIST WALLETS & REMOVE THEM FROM BLACKLIST

```
function excludeFromBlacklist(address account) public onlyOwner {
    _blacklist[account] = false;
    emit ExcludedFromBlacklist(account);
}

function includeInBlacklist(address account) public onlyOwner {
    _blacklist[account] = true;
    emit IncludedInBlacklist(account);
}
```

OWNER CAN EXCLUDE WALLETS FROM THE ANTI-WHALE FUNCTION

```
function excludeFromAntiWhales(address account) public onlyOwner {
    _isExcludedFromAntiWhales[account] = true;
    emit ExcludedFromAntiWhales(account);
}

function includeInAntiWhales(address account) public onlyOwner {
    _isExcludedFromAntiWhales[account] = false;
    emit IncludedInAntiWhales(account);
}
```

OWNER PRIVILEGES PART 2

OWNER CAN EXCLUDE AND INCLUDE WALLETS FROM TRANSACTION FEES

```
function excludeFromFee(address account) external onlyOwner {
    _isExcludedFromFee[account] = true;
}

function includeInFee(address account) external onlyOwner {
    _isExcludedFromFee[account] = false;
}
```

OWNER CAN MINT NEW TOKENS – MAY BE NECESSARY DUE TO CLIENT RUNNING A SWAP SERVICE

```
function _mint(address account, uint256 amount) internal {
    require(account != address(0), "ERC20: mint to the zero address");

    _totalSupply = _totalSupply.add(amount);
    _balances[account] = _balances[account].add(amount);
    emit Transfer(address(0), account, amount);
}
```

OWNER CAN CHANGE MARKETING WALLET OF TOKEN

```
function setMarketingWallet(address payable newMarketingWallet)
    external
    onlyOwner
```

THE OWNER CAN CHANGE THE TAX UP TO 10% FOR EVERY TRANSACTION

```
uint16 public MaxLiquifyFee = 500; // 30% max
uint16 public MaxMarketingFee = 500; // 30% max

-----

function setAllFeePercent(uint16 liquifyFee, uint16 marketingFee)
    external
    onlyOwner
{
    require(liquifyFee <= MaxLiquifyFee, "Liquidity fee overflow");
    require(marketingFee <= MaxMarketingFee, "Buyback fee overflow");
    _liquifyFee = liquifyFee;
    _marketingFee = marketingFee;
}
```

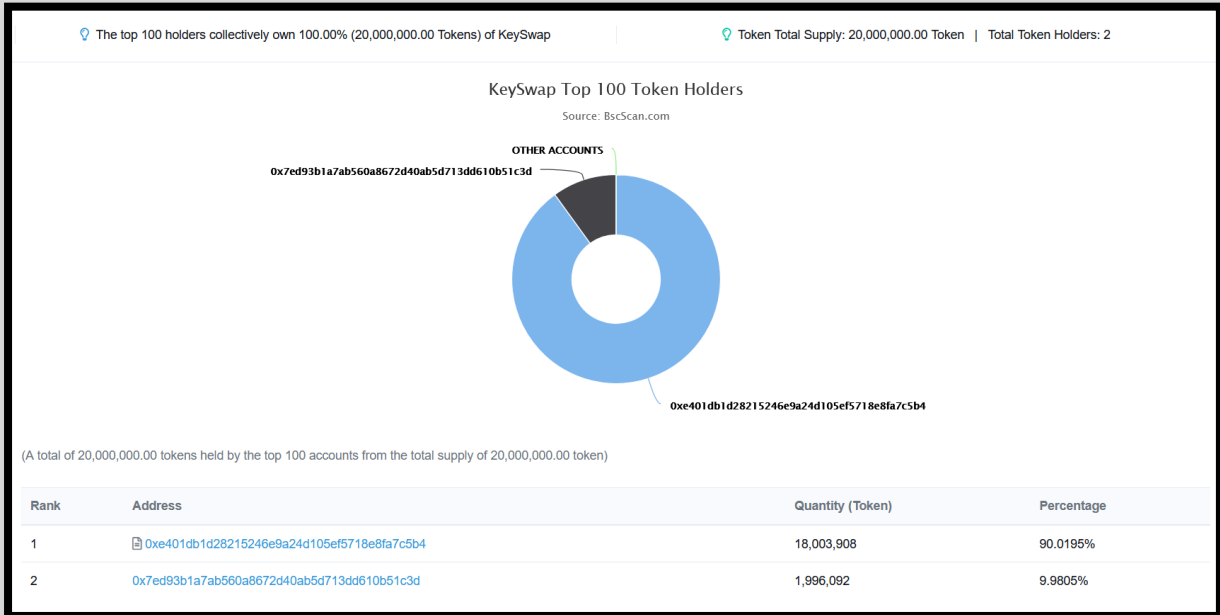
THE OWNER CAN ENABLE/DISABLE TAXATION ON TOKEN SALE

```
bool public _applyFeeOnlyOnSell = false;

-----


function applyFeeOnlyOnSell(bool flag) external onlyOwner {
    _applyFeeOnlyOnSell = flag;
}
```

TOKEN ANALYTICS

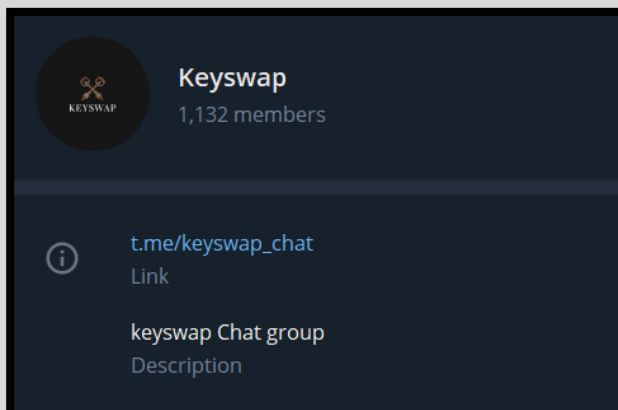


SOCIAL MEDIA ANALYSIS

TWITTER ACTIVITY ANALYSIS OF CLIENT AS OF 05/03/2022 FROM TRACKING AVAILABILITY

	keyswap	02.04.2022 - 03.05.2022			
Total Likes	Total Shares	Total Posts	Followers	ER day, %	
872	641	9	738	34.169%	
ER post, %	LR, %	Average Likes	Average Shares		
22.779%	13.129%	97	71		

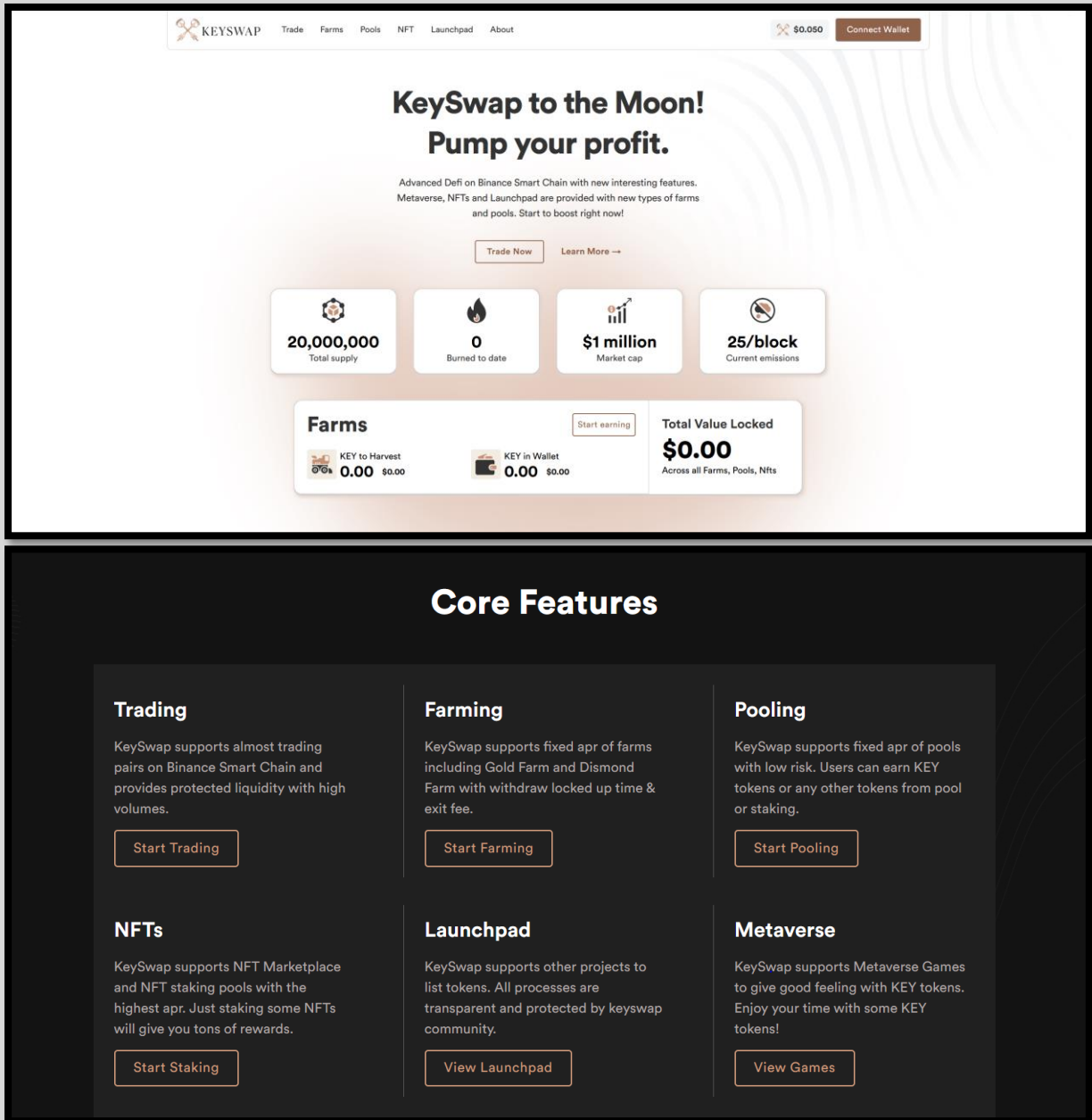
TELEGRAM CHANNEL MEMBER SIZE AS OF 05/03/2022



- Average new member per hour: **68**
- Average time between messages: **21 SEC**
- Telegram Hype Level: **HIGH**

WEBSITE ANALYSIS

KEYSWAP.EXCHANGE



KEYSWAP.EXCHANGE WEBSITE IS THE MAIN PLATFORM OF THE **KEYSWAP** TOKEN. IT IS WELL DESIGNED, PACKED WITH FEATURES, AND IS OF HIGH QUALITY. **RHINO** GIVES THIS WEBSITE A **9/10** IN TERMS OF DESIGN, RESPONSIVENESS, USER FRIENDLY INTERACTIVITY, AND OVERALL EASE OF READING.

DISCLAIMER

RHINO AUDITING HAS CHECKED THE CONTRACT CAREFULLY AND SCANNED EVERY LINE MANUALLY & USED A COMBINATION OF OVER 9 TOOLS FOR AUTOMATIC ANALYSIS. THIS GUARANTEES A HIGH LEVEL OF SAFETY AND LOW MARGIN OF ERROR. HOWEVER, WE DO NOT PROVIDE ANY WARRANTY OR GUARANTEE THAT THE CONTRACT IS ABSOLUTELY BUG FREE DUE TO THE NATURE OF THE SMART CONTRACTS.

AN AUDIT PROVIDED BY RHINO AUDITING SHOULD NOT BE CONSIDERED AS AN "ENDORSEMENT" OR "DISAPPROVAL" OF THE PROJECT/TOKEN ANALYZED AND SHOULD NOT BE USED AS A POSITIVE FOR INVESTMENT. AN AUDIT BY RHINOAUDITING IS MERELY AN ADVISORY TOOL PROVIDED TO THE CLIENT WHICH EMPHASIZES THE STRENGTH AND WEAKNESSES OF THEIR SMART CONTRACT/PROJECT. IT THE INVESTOR'S CHOICE IF THEY WISH TO SHARE THIS INFORMATION WITH INVESTORS.

RHINO AUDITING USUALLY PROVIDES SUGGESTIONS ON HOW TO FIX VULNERABILITIES THAT APPEAR – IF THERE IS NO SUCH INFORMATION THAT MEANS THAT THE SMART CONTRACT AUDIT HAS LIKELY DETECTED NO ERRORS, THEREFORE NO ADVICE TO BE GIVEN.

CRYPTOCURRENCIES AND ESPECIALLY NEWLY LAUNCHED CRYPTOCURRENCIES PROVIDE A HIGH LEVEL OF RISK. THEREFORE, IT'S EACH INVESTORS RESPONSIBILITY TO DO PROPER RESEARCH INTO THE TRUSTWORTHINESS OF EACH PROJECT THEY INVEST IN.

OUR SOCIAL MEDIA

WEBSITE: [RHINOAUDITING.COM](https://rhinoauditing.com)

TWITTER: [@RHINOAUDITING](https://twitter.com/rhinoauditing)

TELEGRAM: [T.ME/RHINOAUDITING](https://t.me/rhinoauditing)

EMAIL: [ADMIN@RHINOAUDITING.COM](mailto:admin@rhinoauditing.com)



BOOK AN AUDIT BY CONTACTING: [T.ME/RHINOCEO](https://t.me/rhinoceo)

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