

# Nitro Pyro Smart Contract Audit Report



04 Nov 2022



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# AUDITED DETAILS

### Audited Project

Project name	Token ticker	Blockchain	
Nitro Pyro	NIPYRO	Arbitrum	

### Addresses

Contract address	0x1549d3e06e900452316f8e322fb09026a0dce737
Contract deployer address	0x892f18aA2CFC95bfbA06EdE543873FE6d787c1a9

### Project Website

https://www.nitro-pyro.com/

### Codebase

https://arbiscan.io/address/0x1549d3e06e900452316f8e322fb09026a0dce737#code



# SUMMARY

NITRO-PYRO is devoted to allowing our community to best gain value from Nitro pyro by innovating on-chain utility to enable our investors to profit.NITRO-PYRO empowers the community through transparency, security, and experience. Our team is of the mindset that any investment is a bet on the team, so we are here to provide value to investors through our expansive inventory of market Flames and Nitro.

### Contract Summary

#### **Documentation Quality**

Nitro Pyro provides a very good documentation with standard of solidity base code.

• The technical description is provided clearly and structured and also dont have any high risk issue.

#### **Code Quality**

The Overall quality of the basecode is standard.

• Standard solidity basecode and rules are already followed by Nitro Pyro with the discovery of several low issues.

#### **Test Coverage**

Test coverage of the project is 100% (Through Codebase)

### Audit Findings Summary

- SWC-101 | It is recommended to use vetted safe math libraries for arithmetic operations consistently on lines 479, 511, 534, 535, 570, 606, 672, 676, 688, 695, 704, 943, 943, 944, 950, 950, 951, 951, 952, 952, 956, 960, 984, 988, 1016, 1023, 1037, 1037, 1038, 1038, 1039, 1039, 1087, 1094, 1102, 1137, 1137, 1138, 1138, 1138, 1145, 1145, 1145, 1146, 1146, 1146, 1159, 1191 and 1192.
- SWC-110 SWC-123 | It is recommended to use of revert(), assert(), and require() in Solidity, and the new REVERT opcode in the EVM on lines 1169 and 1170.
- SWC-115 | tx.origin should not be used for authorization, use msg.sender instead on lines 1086 and 1087.
- SWC-120 | It is recommended to use external sources of randomness via oracles on lines 1086 and 1087.



# CONCLUSION

We have audited the Nitro Pyro project released in November 2022 to discover issues and identify potential security vulnerabilities in Nitro Pyro Project. This process is used to find technical issues and security loopholes which might be found in the smart contract.

The security audit report provides a satisfactory result with some low-risk issues.

The issues found in the Nitro Pyro smart contract code do not pose a considerable risk. The writing of the contract is close to the standard of writing contracts in general. The low-risk issues found are some arithmetic operation issues, the use of "tx.origin" as a part of authorization control, out-of-bounds array access, and the potential use of "block.number" as a source of randomness. The environment variable "block.number" looks like it might be used as a source of randomness. Note that the values of variables like coinbase, gaslimit, block number and timestamp are predictable and can be manipulated by a malicious miner. Also, keep in mind that attackers know hashes of earlier blocks. Don't use any of those environment variables as sources of randomness and be aware that the use of these variables introduces a certain level of trust in miners. Using "tx.origin" as a security control can lead to authorization bypass vulnerabilities. Consider using "msg.sender" unless you really know what you are doing.



# AUDIT RESULT

Article	Category	Description	Result	
Default Visibility	SWC-100 SWC-108	Functions and state variables visibility should be set explicitly. Visibility levels should be specified consciously.	PASS	
Integer Overflow and Underflow	SWC-101	If unchecked math is used, all math operations should be safe from overflows and underflows.	ISSUE FOUND	
Outdated Compiler Version	SWC-102	It is recommended to use a recent version of the Solidity compiler.		
Floating Pragma	SWC-103	Contracts should be deployed with the same compiler version and flags that they have been tested thoroughly.	PASS	
Unchecked Call Return Value	SWC-104	The return value of a message call should be checked.	PASS	
Unprotected Ether Withdrawal	SWC-105	Due to missing or insufficient access controls, malicious parties can withdraw from the contract.		
SELFDESTRUCT Instruction	SWC-106	The contract should not be self-destructible while it has funds belonging to users.		
Reentrancy	SWC-107	Check effect interaction pattern should be followed if the code performs recursive call.		
Uninitialized Storage Pointer	SWC-109	Uninitialized local storage variables can point to unexpected storage locations in the contract.		
Assert Violation	SWC-110 SWC-123	Properly functioning code should never reach a failing assert statement.	ISSUE FOUND	
Deprecated Solidity Functions	SWC-111	Deprecated built-in functions should never be used. PAS		
Delegate call to Untrusted Callee	SWC-112	Delegatecalls should only be allowed to trusted addresses.	PASS	



$\frown$			
DoS (Denial of Service)	SWC-113 SWC-128	Execution of the code should never be blocked by a specific contract state unless required.	PASS
Race Conditions	SWC-114	Race Conditions and Transactions Order Dependency should not be possible.	PASS
Authorization through tx.origin	SWC-115	tx.origin should not be used for authorization.	ISSUE FOUND
Block values as a proxy for time	SWC-116	Block numbers should not be used for time calculations.	PASS
Signature Unique ID	SWC-117 SWC-121 SWC-122	Signed messages should always have a unique id. A transaction hash should not be used as a unique id.	PASS
Incorrect Constructor Name	SWC-118	Constructors are special functions that are called only once during the contract creation.	PASS
Shadowing State Variable	SWC-119	State variables should not be shadowed.	PASS
Weak Sources of Randomness	SWC-120	Random values should never be generated from Chain Attributes or be predictable.	
Write to Arbitrary Storage Location	SWC-124	The contract is responsible for ensuring that only authorized user or contract accounts may write to sensitive storage locations.	PASS
Incorrect Inheritance Order	SWC-125	When inheriting multiple contracts, especially if they have identical functions, a developer should carefully specify inheritance in the correct order. The rule of thumb is to inherit contracts from more /general/ to more /specific/.	PASS
Insufficient Gas Griefing	SWC-126	Insufficient gas griefing attacks can be performed on contracts which accept data and use it in a sub-call on another contract.	
Arbitrary Jump Function	SWC-127	As Solidity doesnt support pointer arithmetics, it is impossible to change such variable to an arbitrary value.	PASS



Typographical Error	SWC-129	A typographical error can occur for example when the intent of a defined operation is to sum a number to a variable.	
Override control character	SWC-130	Malicious actors can use the Right-To-Left-Override unicode character to force RTL text rendering and confuse users as to the real intent of a contract.	
Unused variables	SWC-131 SWC-135	Unused variables are allowed in Solidity and they do not pose a direct security issue.	PASS
Unexpected Ether balance	SWC-132	Contracts can behave erroneously when they strictly assume a specific Ether balance.	
Hash Collisions Variable	SWC-133	Using abi.encodePacked() with multiple variable length arguments can, in certain situations, lead to a hash collision.	PASS
Hardcoded gas amount	SWC-134	The transfer() and send() functions forward a fixed amount of 2300 gas.	
Unencrypted Private Data	SWC-136	It is a common misconception that private type variables cannot be read.	PASS



## **SMART CONTRACT ANALYSIS**

Started	Thursday Nov 03 2022 02:00:02 GMT+0000 (Coordinated Universal Time)		
Finished	Friday Nov 04 2022 10:02:45 GMT+0000 (Coordinated Universal Time)		
Mode	Standard		
Main Source File	Token.sol		

### Detected Issues

ID	Title	Severity	Status
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "%" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged



SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+" DISCOVERED	low	acknowledged





SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "+=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "/" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "-=" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-101	ARITHMETIC OPERATION "*" DISCOVERED	low	acknowledged
SWC-115	USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTROL.	low	acknowledged
SWC-115	USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTROL.	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-110	OUT OF BOUNDS ARRAY ACCESS	low	acknowledged
SWC-120	POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.	low	acknowledged
SWC-120	POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.	low	acknowledged



**LINE 479** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
478 function add(uint256 a, uint256 b) internal pure returns (uint256) {
479 uint256 c = a + b;
480 require(c >= a, "SafeMath: addition overflow");
481
482 return c;
483
```



LINE 511

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

### Source File

- Token.sol

```
510 require(b <= a, errorMessage);
511 uint256 c = a - b;
512
513 return c;
514 }
515</pre>
```



**LINE 534** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

### Source File

- Token.sol

```
533
534 uint256 c = a * b;
535 require(c / a == b, "SafeMath: multiplication overflow");
536
537 return c;
538
```



### SWC-101 | ARITHMETIC OPERATION "/" DISCOVERED

**LINE 535** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
534 uint256 c = a * b;
535 require(c / a == b, "SafeMath: multiplication overflow");
536
537 return c;
538 }
539
```



**LINE 570** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
569 require(b > 0, errorMessage);
570 uint256 c = a / b;
571 // assert(a == b * c + a % b); // There is no case in which this doesn't hold
572
573 return c;
574
```



**LINE 606** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
605 require(b != 0, errorMessage);
606 return a % b;
607 }
608 }
609
610
```



**LINE 672** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

### Source File

- Token.sol

```
671 function mul(int256 a, int256 b) internal pure returns (int256) {
672 int256 c = a * b;
673
674 // Detect overflow when multiplying MIN_INT256 with -1
675 require(c != MIN_INT256 || (a & MIN_INT256) != (b & MIN_INT256));
676
```



**LINE 676** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
675 require(c != MIN_INT256 || (a & MIN_INT256) != (b & MIN_INT256));
676 require((b == 0) || (c / b == a));
677 return c;
678 }
679 680
```



**LINE 688** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

### Source File

- Token.sol

```
687 // Solidity already throws when dividing by 0.
688 return a / b;
689 }
690
691 /**
692
```



**LINE 695** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
694 function sub(int256 a, int256 b) internal pure returns (int256) {
695 int256 c = a - b;
696 require((b >= 0 && c <= a) || (b < 0 && c > a));
697 return c;
698 }
699
```



**LINE** 704

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
703 function add(int256 a, int256 b) internal pure returns (int256) {
704 int256 c = a + b;
705 require((b >= 0 && c >= a) || (b < 0 && c < a));
706 return c;
707 }
708</pre>
```



### SWC-101 | ARITHMETIC OPERATION "\*" DISCOVERED

**LINE 943** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
942
943 uint256 totalSupply = 1 * 1e6 * 1e6;
944 supply += totalSupply;
945
946 walletDigit = 2;
947
```



### SWC-101 | ARITHMETIC OPERATION "\*" DISCOVERED

**LINE 943** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
942
943 uint256 totalSupply = 1 * 1e6 * 1e6;
944 supply += totalSupply;
945
946 walletDigit = 2;
947
```



**LINE 944** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
943 uint256 totalSupply = 1 * 1e6 * 1e6;
944 supply += totalSupply;
945
946 walletDigit = 2;
947 transDigit = 2;
948
```



**LINE 950** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
949
950 maxTransactionAmount = supply * transDigit / 200;
951 swapTokensAtAmount = supply * 5 / 10000; // 0.05% swap wallet;
952 maxWallet = supply * walletDigit / 200;
953
954
```



**LINE 950** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
949
950 maxTransactionAmount = supply * transDigit / 200;
951 swapTokensAtAmount = supply * 5 / 10000; // 0.05% swap wallet;
952 maxWallet = supply * walletDigit / 200;
953
954
```



**LINE 951** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

### Source File

- Token.sol

```
950 maxTransactionAmount = supply * transDigit / 200;
951 swapTokensAtAmount = supply * 5 / 10000; // 0.05% swap wallet;
952 maxWallet = supply * walletDigit / 200;
953
954 buyBurnFee = _buyBurnFee;
955
```



**LINE 951** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
950 maxTransactionAmount = supply * transDigit / 200;
951 swapTokensAtAmount = supply * 5 / 10000; // 0.05% swap wallet;
952 maxWallet = supply * walletDigit / 200;
953
954 buyBurnFee = _buyBurnFee;
955
```



**LINE 952** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
951 swapTokensAtAmount = supply * 5 / 10000; // 0.05% swap wallet;
952 maxWallet = supply * walletDigit / 200;
953
954 buyBurnFee = _buyBurnFee;
955 buyDevFee = _buyDevFee;
956
```



**LINE 952** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
951 swapTokensAtAmount = supply * 5 / 10000; // 0.05% swap wallet;
952 maxWallet = supply * walletDigit / 200;
953
954 buyBurnFee = _buyBurnFee;
955 buyDevFee = _buyDevFee;
956
```



**LINE 956** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

### Source File

- Token.sol

```
955 buyDevFee = _buyDevFee;
956 buyTotalFees = buyBurnFee + buyDevFee;
957
958 sellBurnFee = _sellBurnFee;
959 sellDevFee = _sellDevFee;
960
```



**LINE 960** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
959 sellDevFee = _sellDevFee;
960 sellTotalFees = sellBurnFee + sellDevFee;
961
962 devWallet = 0x892f18aA2CFC95bfbA06EdE543873FE6d787c1a9;
963
964
```



**LINE 984** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
983 buyDevFee = 5;
984 buyTotalFees = buyBurnFee + buyDevFee;
985
986 sellBurnFee = 4;
987 sellDevFee = 5;
988
```



### SWC-101 | ARITHMETIC OPERATION "+" DISCOVERED

**LINE 988** 

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
987 sellDevFee = 5;
988 sellTotalFees = sellBurnFee + sellDevFee;
989
990 delayDigit = 5;
991 }
992
```



LINE 1016

### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

### Source File

- Token.sol

```
1015 buyDevFee = _devFee;
1016 buyTotalFees = buyBurnFee + buyDevFee;
1017 require(buyTotalFees <= 15, "Must keep fees at 20% or less");
1018 }
1019
1020
```



LINE 1023

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1022 sellDevFee = _devFee;
1023 sellTotalFees = sellBurnFee + sellDevFee;
1024 require(sellTotalFees <= 15, "Must keep fees at 25% or less");
1025 }
1026
1027
```



LINE 1037

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1036 function updateLimits() private {
1037 maxTransactionAmount = supply * transDigit / 100;
1038 swapTokensAtAmount = supply * 5 / 10000; // 0.05% swap wallet;
1039 maxWallet = supply * walletDigit / 100;
1040 }
1041
```



LINE 1037

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1036 function updateLimits() private {
1037 maxTransactionAmount = supply * transDigit / 100;
1038 swapTokensAtAmount = supply * 5 / 10000; // 0.05% swap wallet;
1039 maxWallet = supply * walletDigit / 100;
1040 }
1041
```



LINE 1038

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1037 maxTransactionAmount = supply * transDigit / 100;
1038 swapTokensAtAmount = supply * 5 / 10000; // 0.05% swap wallet;
1039 maxWallet = supply * walletDigit / 100;
1040 }
1041
1042
```



LINE 1038

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1037 maxTransactionAmount = supply * transDigit / 100;
1038 swapTokensAtAmount = supply * 5 / 10000; // 0.05% swap wallet;
1039 maxWallet = supply * walletDigit / 100;
1040 }
1041
1042
```



LINE 1039

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1038 swapTokensAtAmount = supply * 5 / 10000; // 0.05% swap wallet;
1039 maxWallet = supply * walletDigit / 100;
1040 }
1041
1042 function setAutomatedMarketMakerPair(address pair, bool value) public onlyOwner {
1043
```



LINE 1039

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1038 swapTokensAtAmount = supply * 5 / 10000; // 0.05% swap wallet;
1039 maxWallet = supply * walletDigit / 100;
1040 }
1041
1042 function setAutomatedMarketMakerPair(address pair, bool value) public onlyOwner {
1043
```



LINE 1087

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1086 require(_holderLastTransferTimestamp[tx.origin] < block.number, "_transfer::
Transfer Delay enabled. Only one purchase per block allowed.");
1087 _holderLastTransferTimestamp[tx.origin] = block.number + delayDigit;
1088 }
1089 }
1090
1091
```



LINE 1094

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1093 require(amount <= maxTransactionAmount, "Buy transfer amount exceeds the
maxTransactionAmount.");
1094 require(amount + balanceOf(to) <= maxWallet, "Max wallet exceeded");
1095 }
1096
1097 //when sell
1098</pre>
```



LINE 1102

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1101 else if(!_isExcludedMaxTransactionAmount[to]){
1102 require(amount + balanceOf(to) <= maxWallet, "Max wallet exceeded");
1103 }
1104 }
1105 }
1106</pre>
```



LINE 1137

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1136 fees = amount.mul(sellTotalFees).div(100);
1137 tokensForBurn += fees * sellBurnFee / sellTotalFees;
1138 tokensForDev += fees * sellDevFee / sellTotalFees;
1139 }
1140
1141
```



LINE 1137

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1136 fees = amount.mul(sellTotalFees).div(100);
1137 tokensForBurn += fees * sellBurnFee / sellTotalFees;
1138 tokensForDev += fees * sellDevFee / sellTotalFees;
1139 }
1140
1141
```



LINE 1137

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1136 fees = amount.mul(sellTotalFees).div(100);
1137 tokensForBurn += fees * sellBurnFee / sellTotalFees;
1138 tokensForDev += fees * sellDevFee / sellTotalFees;
1139 }
1140
1141
```



LINE 1138

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1137 tokensForBurn += fees * sellBurnFee / sellTotalFees;
1138 tokensForDev += fees * sellDevFee / sellTotalFees;
1139 }
1140
1141 // on buy
1142
```



LINE 1138

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1137 tokensForBurn += fees * sellBurnFee / sellTotalFees;
1138 tokensForDev += fees * sellDevFee / sellTotalFees;
1139 }
1140
1141 // on buy
1142
```



LINE 1138

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1137 tokensForBurn += fees * sellBurnFee / sellTotalFees;
1138 tokensForDev += fees * sellDevFee / sellTotalFees;
1139 }
1140
1141 // on buy
1142
```



LINE 1145

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1144 fees = amount.mul(buyTotalFees).div(100);
1145 tokensForBurn += fees * buyBurnFee / buyTotalFees;
1146 tokensForDev += fees * buyDevFee / buyTotalFees;
1147 }
1148
1149
```



LINE 1145

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1144 fees = amount.mul(buyTotalFees).div(100);
1145 tokensForBurn += fees * buyBurnFee / buyTotalFees;
1146 tokensForDev += fees * buyDevFee / buyTotalFees;
1147 }
1148
1149
```



LINE 1145

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1144 fees = amount.mul(buyTotalFees).div(100);
1145 tokensForBurn += fees * buyBurnFee / buyTotalFees;
1146 tokensForDev += fees * buyDevFee / buyTotalFees;
1147 }
1148
1149
```



LINE 1146

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1145 tokensForBurn += fees * buyBurnFee / buyTotalFees;
1146 tokensForDev += fees * buyDevFee / buyTotalFees;
1147 }
1148
1149 if(fees > 0){
1150
```



LINE 1146

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1145 tokensForBurn += fees * buyBurnFee / buyTotalFees;
1146 tokensForDev += fees * buyDevFee / buyTotalFees;
1147 }
1148
1149 if(fees > 0){
1150
```



LINE 1146

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

```
1145 tokensForBurn += fees * buyBurnFee / buyTotalFees;
1146 tokensForDev += fees * buyDevFee / buyTotalFees;
1147 }
1148
1149 if(fees > 0){
1150
```



LINE 1159

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

#### Locations

1158
1159 amount -= fees;
1160 }
1161
1162 super.\_transfer(from, to, amount);
1163



LINE 1191

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

#### Locations

1190
1191 if(contractBalance > swapTokensAtAmount \* 20){
1192 contractBalance = swapTokensAtAmount \* 20;
1193 }
1194
1195



LINE 1192

#### **Iow SEVERITY**

This plugin produces issues to support false positive discovery within mythril.

#### Source File

- Token.sol

#### Locations

1191 if(contractBalance > swapTokensAtAmount \* 20){
1192 contractBalance = swapTokensAtAmount \* 20;
1193 }
1194
1195 swapTokensForEth(contractBalance);
1196



# SWC-115 | USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTROL.

LINE 1086

#### **Iow SEVERITY**

The tx.origin environment variable has been found to influence a control flow decision. Note that using "tx.origin" as a security control might cause a situation where a user inadvertently authorizes a smart contract to perform an action on their behalf. It is recommended to use "msg.sender" instead.

#### Source File

- Token.sol

```
1085 if (to != owner() && to != address(uniswapV2Router) && to !=
address(uniswapV2Pair)){
1086 require(_holderLastTransferTimestamp[tx.origin] < block.number, "_transfer::
Transfer Delay enabled. Only one purchase per block allowed.");
1087 _holderLastTransferTimestamp[tx.origin] = block.number + delayDigit;
1088 }
1089 }
1090</pre>
```





# SWC-115 USE OF "TX.ORIGIN" AS A PART OF AUTHORIZATION CONTROL.

LINE 1087

#### **Iow SEVERITY**

Using "tx.origin" as a security control can lead to authorization bypass vulnerabilities. Consider using "msg.sender" unless you really know what you are doing.

#### Source File

- Token.sol

#### Locations

1086 require(\_holderLastTransferTimestamp[tx.origin] < block.number, "\_transfer:: Transfer Delay enabled. Only one purchase per block allowed."); 1087 \_holderLastTransferTimestamp[tx.origin] = block.number + delayDigit; 1088 } 1089 } 1090 1091



## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1169

#### **Iow SEVERITY**

The index access expression can cause an exception in case of use of invalid array index value.

#### Source File

- Token.sol

```
1168 address[] memory path = new address[](2);
1169 path[0] = address(this);
1170 path[1] = uniswapV2Router.WETH();
1171
1172 _approve(address(this), address(uniswapV2Router), tokenAmount);
1173
```



## SWC-110 | OUT OF BOUNDS ARRAY ACCESS

LINE 1170

#### **Iow SEVERITY**

The index access expression can cause an exception in case of use of invalid array index value.

#### Source File

- Token.sol

```
1169 path[0] = address(this);
1170 path[1] = uniswapV2Router.WETH();
1171
1172 __approve(address(this), address(uniswapV2Router), tokenAmount);
1173
1174
```



## SWC-120 | POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.

LINE 1086

#### **Iow SEVERITY**

The environment variable "block.number" looks like it might be used as a source of randomness. Note that the values of variables like coinbase, gaslimit, block number and timestamp are predictable and can be manipulated by a malicious miner. Also keep in mind that attackers know hashes of earlier blocks. Don't use any of those environment variables as sources of randomness and be aware that use of these variables introduces a certain level of trust into miners.

#### Source File

- Token.sol

```
1085 if (to != owner() && to != address(uniswapV2Router) && to !=
address(uniswapV2Pair)){
1086 require(_holderLastTransferTimestamp[tx.origin] < block.number, "_transfer::
Transfer Delay enabled. Only one purchase per block allowed.");
1087 _holderLastTransferTimestamp[tx.origin] = block.number + delayDigit;
1088 }
1089 }
1090</pre>
```





## SWC-120 | POTENTIAL USE OF "BLOCK.NUMBER" AS SOURCE OF RANDOMNESS.

LINE 1087

#### **Iow SEVERITY**

The environment variable "block.number" looks like it might be used as a source of randomness. Note that the values of variables like coinbase, gaslimit, block number and timestamp are predictable and can be manipulated by a malicious miner. Also keep in mind that attackers know hashes of earlier blocks. Don't use any of those environment variables as sources of randomness and be aware that use of these variables introduces a certain level of trust into miners.

#### Source File

- Token.sol

```
1086 require(_holderLastTransferTimestamp[tx.origin] < block.number, "_transfer::
Transfer Delay enabled. Only one purchase per block allowed.");
1087 _holderLastTransferTimestamp[tx.origin] = block.number + delayDigit;
1088 }
1089 }
1090
1091
```





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