

Test Report

Test report No.:
T-J0005-I0112

Date of issue:
2017-12-01

Applicant:
Bee-Fee Ltd., 27 Old Gloucester Street, WC1N 3AX London, United Kingdom

Manufacturer:
Bee-Fee Ltd., 27 Old Gloucester Street, WC1N 3AX London, United Kingdom

Product:
Jewels World
Product type:
Internet games (reels)

Target device:
BF Games
Target device type:
Internet gaming system

Jurisdiction:
United Kingdom
Test Criteria:
Remote gambling and software technical standards June 2017.

Pages (with annexes):	Verdict (subject to conditions in Chapter 1):
12	Pass
Test report type:	Subject file No.:
Game	17000460015
Test group(s):	
Payback, Software	
Remarks:	
N.A.	

Project responsible person [signature]:

Reviewed by [signature]:

Gregor Zakrajšek

Franci Pikl



1 Conditions and settings for compliance with test criteria

Testing performed with English language setting.

Game texts are stored in file **allJSON.json**; this file shall include the following section:

"jw_rules_about": "Jewels World is a 5-reel, 3-row video slot with 20 paylines. The objective is to land as many identical symbols as possible along a payline. Winning combinations start on the first reel on the left and run along an active payline to the last reel on the right. Only the highest winning combination of one symbol is paid out. After activating a payline (which can include three BONUS symbols), all winning symbols disappear and new symbols enter gameplay. New symbols form new winning combinations, that are multiplied by an increasing MULTIPLIER. The win MULTIPLIER increases with every new Cascade during both regular gameplay and Free Spins rounds. The Cascade MULTIPLIER increases in incremental steps as follows: x1, x2, x3, and x5.",

"jw_rules_free_spins": "Landing three BONUS symbols on a payline triggers 15 Free Spins with a x3 MULTIPLIER. Free Spins can be re-triggered. Free Spins are played on the same reels as regular gameplay.",

"jw_rules_wild_symbol": "The WILD in the game is the GOLD symbol. The WILD substitutes all other symbols on the reels including the BONUS symbol. WILDs can only appear on the middle three reels. There can only be one WILD or BONUS symbol on each of the middle three reels. WILD and BONUS symbols cannot appear simultaneously on the same reel. Combinations using only WILD symbols cannot create wins. WILDs can only help generate wins by combining with other symbols to complete a winning line.",

"jw_rules_bonus_symbol": "The BONUS symbol in the game is the TREASURE CHEST symbol. Landing three BONUS symbols on a payline triggers 15 Free Spins with a x3 MULTIPLIER. BONUS symbols can only appear on the first three reels. There can only be one WILD or BONUS symbol on each of the middle three reels. WILD and BONUS symbols cannot appear on the same reel."

To comply with RTS 8 Auto-play functionality, server configuration (available in adminui) shall include the following setting:

```
"autoplaySpinCountLimits": [ 10, 20, 30, 40 ], //number of autospins
```

To comply with RTS 13B Reality checks functionality, server configuration (available in adminui) shall include the following setting:

```
"realityChecks": [{"caption": "RealityCheck", "interval": 600, "isDefault": true}]
```

2 Protection against unauthorized access

See the corresponding platform test report(s).

3 Gaming device general properties

General device design:	Server, Linux, MongoDB
Cabinet(s):	N.A.
Available player denominations:	N.A.
Available tokenizations:	N.A.
Supported communication protocols:	N.A.



Supported progressives:	N.A.
Minimum bet (credits):	1 (per game)
Maximum bet (credits):	20 (per game)

4 Annexes

Annex / Test group	Attached [yes/no]	Remark
Functional tests	No	/
Randomness tests	No	/
Payback ratio tests	Yes	/
Software analysis	Yes	/
Device specific tests	No	/
Other annexes	No	/

5 Previous / transferred test reports results

N.A.

6 Additional information

The following RTS articles from Remote gambling and software technical standards, June 2017 were reviewed during testing and found compliant:

- RTS 1 Requirements 1A (before April 1, 2018), 1A (after April 1, 2018), 1B (before April 1, 2018), 1B (after April 1, 2018), 1C (after April 1, 2018): **Not applicable (IGS requirements)**
- RTS 2 Requirements 2A (before April 1, 2018), 2A (after April 1, 2018), 2B (before April 1, 2018), 2B (after April 1, 2018), 2C (after April 1, 2018), 2D: **Game compliant where applicable, see also IGS and RGS tests**
- RTS 3 Requirements 3A, 3C, 3D: **Game compliant where applicable (No virtual events)**
- RTS 4 Requirements 4A, 4B: **Game complies (No influence for time-critical events)**
- RTS 5 Requirement 5A: **Game complies**
- RTS 6 Requirement 6A: **Game complies**
- RTS 7 Requirements 7A, 7B, 7C, 7D, 7E: **Game compliant where applicable (see also RGS tests)**
- RTS 8 Requirement 8A: **Game complies**
- RTS 9 Requirements 9A, 9B: **Not applicable (No progressives configured during testing)**
- RTS 10 Requirements 10A, 10B, 10C: **Not applicable (No peer-to-peer betting; Stateless game)**
- RTS 11 Requirements 11A (before October 1, 2018), 11A (after October 1, 2018), 11B (before April 1, 2018), 11B (after April 1, 2018): **Not applicable (No peer-to-peer betting)**
- RTS 12 Requirements 12A (before April 1, 2018), 12A (after April 1, 2018), 12B: RTS 8 Requirement 8A: **Not applicable (not game related)**
- RTS 13 Requirements 13A, 13B: **Game complies**
- RTS 14 Requirement 14A: **Game complies**



- RTS 15 Requirement 15A: **Not applicable (classic internet reel game)**
- RTS 16 Requirements 16A, 16B (after October 1, 2018), 16C: **Not applicable (no peer-to-peer)**
- RTS 17 Requirement 17A: **Not applicable (no live dealer studios)**

7 Documentation references

The following documentation was used:

- User help,
- Screen capture images,
- Par sheets, Game description,
- Source code and configuration files.

8 Other test report references

Test group	Laboratory	Test report identification and date	Remarks
Functional tests	SIQ	T-J0005-I0098, 2017-12-01	BF Gameserver (with extensions)
Software analysis	SIQ	T-J0005-I0098, 2017-12-01	BF Gameserver (with extensions)
Randomness tests	SIQ	T-J0005-I0098, 2017-12-01	BF Gameserver (with extensions)

Test report replacements and extensions may apply.



1 Description of the game

Game Notes

This is a 3x5 video slot. Play 20 lines per spin.

All winning combinations are left to right only on a pay line.

Only the highest winning combination is paid per line.

Lines pay left to right only, beginning from leftmost reel.

All wins are multiplied by the line bet.

Wild symbols appear on middle three reels only.

Substitutes for all symbols on its own position only, including Bonus symbol.

Bonus symbols appear on all first three reels only.

3 Bonus symbols on a played line initiates 15 Free Spins at x3 multiplier. Wild symbol substitutes for Bonus symbol.

Free spins can be retriggered.

During the free spins the same set of reels is used.

When all reels are stopped, on each reel on the screen can be seen only one Wild symbol or Bonus symbol, but not together.

After any line win (including 3 Bonus hits), all winning symbols disappear and new symbols come from above.

The win multiplier increases with every new Cascade on both regular games and free spins.

Cascade multipliers steps are: x1, x2, x3, x5.

Minimum Bet per Line 1 credit.

Maximum Bet per Line 20 credits.

Symbols

- RECTANGLE
- CIRCLE
- DROP
- HEART
- CHALICE
- DIADEM
- CROWN
- GOLD
- CHEST

2 Pay-glass / artwork illustrations or photos

 5X 25 4X 2.5 3X 0.5	 5X 10 4X 1 3X 0.25	 5X 5 4X 0.5 3X 0.15	 WILD SUBSTITUTES FOR ALL SYMBOLS
 5X 2 4X 0.25 3X 0.1	 5X 1 4X 0.2 3X 0.05	 5X 0.75 4X 0.15 3X 0.04	 5X 0.5 4X 0.1 3X 0.03
			 3X BONUS 15 FREE GAMES + 3X MULTIPLIER

<h1>GAME RULES</h1> <p> JEWELS WORLD IS A 5-REEL, 3-ROW VIDEO SLOT WITH 20 PAYLINES. THE OBJECTIVE IS TO LAND AS MANY IDENTICAL SYMBOLS AS POSSIBLE ALONG A PAYLINE. WINNING COMBINATIONS START ON THE FIRST REEL ON THE LEFT AND RUN ALONG AN ACTIVE PAYLINE TO THE LAST REEL ON THE RIGHT. ONLY THE HIGHEST WINNING COMBINATION OF ONE SYMBOL IS PAID OUT. AFTER ACTIVATING A PAYLINE (WHICH CAN INCLUDE THREE BONUS SYMBOLS), ALL WINNING SYMBOLS DISAPPEAR AND NEW SYMBOLS ENTER GAMEPLAY. NEW SYMBOLS FORM NEW WINNING COMBINATIONS, THAT ARE MULTIPLIED BY AN INCREASING MULTIPLIER. THE WIN MULTIPLIER INCREASES WITH EVERY NEW CASCADE DURING BOTH REGULAR GAMEPLAY AND FREE SPINS ROUNDS. THE CASCADE MULTIPLIER INCREASES IN INCREMENTAL STEPS AS FOLLOWS: X1, X2, X3, AND X5. GAME RTP IS 96.24%, GAMBLE WINRATE IS 50% </p>
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3 Payback ratio

3.1 Payback ratio determination method

The payback ratio value (return to player) was derived using simulation.

3.2 Payback ratio results

Jewels World	
Declared by manufacturer	Verified by test laboratory
96,24%	96,27%

4 Test summary

The following tests for the game were performed:

- Calculation of the payback ratio,
- Conditions and settings for compliance with test criteria,
- Verification of the information to the player.



1 Software identification

Software version(s): 1.0

Software components:

Manufacturer, product ID	Description, function	Media, type	Position, circuit	Size	ID code (SHA1)	ID code (MD5)
Bee-Fee, libjewelsworld.s o	Game library	HDD / SSD	lib\plugins\	155,8 KB	78240d056ee7 84b2cdfb2a33 e254caa9424a a10a	670c1b2dc09e 45c2968916ba c1dd0ff2
Bee-Fee, base_config.js on	Graphics configuration file	HDD / SSD	games\jw\	8,26 KB	a7d7834ed0d3 03f3e1a14261 5c69bab3a976 acf3	0d48440b9cb3 59b7cd34f131 42c47a75
Bee-Fee, jw_16_10.jpg	Game graphics file	HDD / SSD	games\jw\images\16_ 10\	1,08 MB	ff68692f15cb 57139b4425b8 fce06acfb843 7f38	a4fc30fa5692 23db0f0bb0b3 a79a3f27
Bee-Fee, jw_16_10.json	Graphics configuration file	HDD / SSD	games\jw\images\16_ 10\	1,71 KB	830da66480c5 039ef86bbbc7 31186f769539 2542	db3068455991 63f08a38440e adb0ea32
Bee-Fee, jw_16_10_payta ble_en.jpg	Game graphics file	HDD / SSD	games\jw\images\16_ 10\	422,45 KB	fa20957468b3 d533ae1f36ab b73076d6f34d cc04	95a4e6c7aadd 82714bb96c94 a4228856
Bee-Fee, jw_5_4.jpg	Game graphics file	HDD / SSD	games\jw\images\5_4 \	1,36 MB	4fa3915023a6 02b974d2628a a5e203547735 af67	0ed7d534d682 bd1751c42d22 f3c6c91a
Bee-Fee, jw_5_4.json	Graphics configuration file	HDD / SSD	games\jw\images\5_4 \	1,73 KB	c4dff41d3bc1 14b32bfd2291 c0e535247b78 ca25	b4c5e139baaf 9aec56133988 daad601e
Bee-Fee, jw_5_4_paytabl e_en.jpg	Game graphics file	HDD / SSD	games\jw\images\5_4 \	396,12 KB	2a3cbd861d7d e9370c7b0a5d 1fc61f98116a a469	8df9cc16fb0e a9ca0ae64bb5 466d2e85
Bee-Fee, font2.json	Graphics configuration file	HDD / SSD	games\jw\images\co mmon\	17,84 KB	2de934b84a65 90156437ca07 824eb488a74a c8d3	87e80dcce420 26860b3dba28 1746aa1b
Bee-Fee, font2.png_main.j pg	Game graphics file	HDD / SSD	games\jw\images\co mmon\	41,76 KB	e08c5777ac82 951931d1198e 1f2dba4cc5f1 1631	4d2389b1631a 5e9450ac3b30 6ebe9306
Bee-Fee, font2.png_mask. jpg	Game graphics file	HDD / SSD	games\jw\images\co mmon\	65,56 KB	a270ce6bf69b 30182dbb23b1 82a25d0ba3e3 587b	595b3a6dcf56 d736bfbe45f2 cb93666e
Bee-Fee, icons_jw.json	Graphics configuration file	HDD / SSD	games\jw\images\co mmon\	40,39 KB	aa6311ac2d6b bc22c962a577 df6c5f7bbee0 53aa	25fe2a0bda25 e8b309e68b55 cbd1db6d



Manufacturer, product ID	Description, function	Media, type	Position, circuit	Size	ID code (SHA1)	ID code (MD5)
Bee-Fee, icons_jw.png_main.jpg	Game graphics file	HDD / SSD	games\jwimages\common\	1,61 MB	d9b43d432283765f95a44c563b80df625f19321e	14be1f68bf9202a6d7582834391ac0d7
Bee-Fee, icons_jw.png_mask.jpg	Game graphics file	HDD / SSD	games\jwimages\common\	1,7 MB	9d6eb0fdac162dd9204a0d8d024d15048309eca2	ee706c487b78ed8b4cad492fca7d4d6e
Bee-Fee, jw_common.json	Graphics configuration file	HDD / SSD	games\jwimages\common\	6,06 KB	8ae337a4266b05a9823099a48642c89984813a87	b8d15bd7096fd3fd706c2d588a63a33a
Bee-Fee, jw_common.png_main.jpg	Game graphics file	HDD / SSD	games\jwimages\common\	380,57 KB	42e24ada16f3124337b621df88d579059107d059	afe5b98bf543d2108af45034ba852489
Bee-Fee, jw_common.png_mask.jpg	Game graphics file	HDD / SSD	games\jwimages\common\	86,38 KB	aac8f4b55ef93d9ed07f147fc2a9fa3e9903022c	f2b43cb8dd80f6bc96c42d080358ab1b
Bee-Fee, jw_en.json	Graphics configuration file	HDD / SSD	games\jwimages\common\	2,44 KB	fded23b7f7cf2061f5aa68a4c5fc98bd2a0881a1	d35471461f2ff8b6b6bfdbd3c699c902
Bee-Fee, jw_en.png_main.jpg	Game graphics file	HDD / SSD	games\jwimages\common\	231,2 KB	b2847bba6140f0c655225c7b38d0b9ff7120953d	cc4d102c6e2ab299c6c0731a3db4e69f
Bee-Fee, jw_en.png_mask.jpg	Game graphics file	HDD / SSD	games\jwimages\common\	56,17 KB	7de5a0d9e3f6c35ca23bacba676d310e7e47353c	965daa395a5998acb68592a4c475147a
Bee-Fee, jw_symbols.json	Graphics configuration file	HDD / SSD	games\jwimages\common\	92,42 KB	3c4fe026c5434d9174ed693ea0fed1e4e643bfa4	5059a569f004388bbad71f8d04287ec7
Bee-Fee, jw_symbols.png_main.jpg	Game graphics file	HDD / SSD	games\jwimages\common\	2,66 MB	3ac40865088beb750a3512a2584eb56461080951	79896eed39f5e2476134938a1ed17848
Bee-Fee, jw_symbols.png_mask.jpg	Game graphics file	HDD / SSD	games\jwimages\common\	1,69 MB	baebc0949b7f996fc0d5c7bb95c30676da74ddf1	5acee74d0d9c60ed4fea98c8b197ae12
Bee-Fee, jw_background_mobile.jpg	Game graphics file	HDD / SSD	games\jwimages\webl\	313,16 KB	6932207e517f02f4da1ae39325adad337e506885	d5ae3ae89f34cc285c91b8b642a34310
Bee-Fee, jw_paytable_web_en.png	Game graphics file	HDD / SSD	games\jwimages\webl\	1,67 MB	231e5d857e92f1ef82a941cf3645978e98c3b53	49fb46b36c170418df56c3443e8c7661
Bee-Fee, jw_rules_web.json	Graphics configuration file	HDD / SSD	games\jwimages\webl\	1,68 KB	69ffeaeeb4775a81c165fdd758319f62a913e508	eb454904006c35b62517d5a9ac46685e



Manufacturer, product ID	Description, function	Media, type	Position, circuit	Size	ID code (SHA1)	ID code (MD5)
Bee-Fee, jw_rules_web.png_main.jpg	Game graphics file	HDD / SSD	games\jwimages\web\	316,61 KB	6e7be0995ab40fcd4d1a624abac786dedea8ccc7	e8da3690435a1bbd91ecc4eed0fc7013
Bee-Fee, jw_rules_web.png_mask.jpg	Game graphics file	HDD / SSD	games\jwimages\web\	28,03 KB	dd854c18811c627e061ed9775e9e8ad1ea91f231	a6b1bdd9578362dad6387277cbd5eccd
Bee-Fee, jw_web.json	Graphics configuration file	HDD / SSD	games\jwimages\web\	3,62 KB	e01ef14bc05bfbe016d41791a4d3135b059c441d	06064cb25be45eecd9a7e119a93ed344
Bee-Fee, jw_web.png_main.jpg	Game graphics file	HDD / SSD	games\jwimages\web\	327,88 KB	6ecc194a010de11a6735a2d2df408a02a4179f86	f6529da8c4c2a6dd613cf3958d4ada3a
Bee-Fee, jw_web.png_mask.jpg	Game graphics file	HDD / SSD	games\jwimages\web\	70,25 KB	01f4ec10c58f52bd2913d3406563e6b89c403d9c	4150865bfbde10bed038766fdec4995

2 Test summary

Software analysis for the game was performed:

- Source code analysis:
 - o Jurisdiction independent tests: software review.
 - o Jurisdiction dependent tests.
- Binary code authentication.
- Archiving and depositing.