

## Emulator - Emulator Issues #7114

### Tomb Raider: Legend - Water Reflection Texture Bug in Hardware Backends

03/26/2014 07:18 AM - Maylmlae

<b>Status:</b>	Accepted	<b>% Done:</b>	0%
<b>Priority:</b>	Normal		
<b>Assignee:</b>			
<b>Category:</b>	GFX		
<b>Target version:</b>			
<b>Operating system:</b>	N/A	<b>Relates to performance:</b>	No
<b>Issue type:</b>	Bug	<b>Easy:</b>	No
<b>Milestone:</b>		<b>Relates to maintainability:</b>	No
<b>Regression:</b>	No	<b>Regression start:</b>	
<b>Relates to usability:</b>	No	<b>Fixed in:</b>	
<b>Description</b>			
<p>Tomb Raider: Legend (GL8E4F) has a very peculiar bug with its water. It appears as though a texture from the environment is rendered over it, filling the upper left quadrant then stretched for the rest. It even switches between several textures depending on your view.</p> <p><a href="https://wiki.dolphin-emu.org/images/6/61/Tomb_Raider_Legend_Water_Reflections.jpg">https://wiki.dolphin-emu.org/images/6/61/Tomb_Raider_Legend_Water_Reflections.jpg</a></p> <p>Tried EFB to Ram, single core, JITIL, on and on. However, the reflections work in software (though there are tons of other bugs in software that aren't in hardware). Oddly enough the fifolog didn't work in software, and I had to go there manually at a whopping 4fps, but it works.</p> <p>Hardware - <a href="http://i.imgur.com/2r4dgoB.jpg">http://i.imgur.com/2r4dgoB.jpg</a> Software - <a href="http://i.imgur.com/1GEr01N.jpg">http://i.imgur.com/1GEr01N.jpg</a></p> <p>To reproduce, go to anyplace with reflective pools. There is one right at the beginning of the game. Load up the game, skip the cinematic, then climb up the hill a bit, and there's a pool you have to cross to proceed. That's it. Or just use the handy fifolog. However I had some problems with it in software...</p> <p>Fifolog - <a href="http://www.mediafire.com/download/tnmw0lvx4jsweb3/tomb_raider_legend_water_reflection_2_EFBtoRam_fifo.7z">http://www.mediafire.com/download/tnmw0lvx4jsweb3/tomb_raider_legend_water_reflection_2_EFBtoRam_fifo.7z</a></p> <p>Tested on revisions: 4.0-424 win64 4.0-1246 win64 neobrain tev combiner fixes (to make sure the new tev fixes didn't fix it, they don't)</p> <p>Tested on system: Core i5 3570k @ 4.7ghz Nvidia Geforce GTX760 Windows 7 x64</p>			

#### History

#1 - 03/26/2014 07:20 AM - JMC4789

- Status changed from New to Accepted

Confirmed a long time ago but I was too lazy to write it. Thanks <3

#2 - 03/26/2014 08:00 AM - Maylmlae

Rechecked the fifolog with software. Works if "Bypass XFB" is checked.

While I'm at it, the fifolog that is uploaded doesn't show the effect very well, because of it's angle. That's what I get for recording a fifolog while seeing the error. Here's another one that shows the effect better. It's kind of a refraction and reflection thing.

**#3 - 06/13/2015 07:42 PM - Autoran1**

Tested on recent master, and this issue is OGL only now, it was fixed on D3D somehow

**#4 - 09/05/2016 02:48 PM - ZephyrSurfer**

The game needs to disable "Store EFB copies to Texture Only" now.  
Otherwise the floor is black.

Fixed since 5.0-492: <https://dolphin-emu.org/download/dev/9a660fdf1847a276eb90aae8806a6245a51f0ac2/>

**#5 - 09/05/2016 03:51 PM - ZephyrSurfer**

The floor works correctly on Single Core or with "Store EFB Copies to Texture Only".

Odd that there was a difference in behavior between backends.