

# **The BP Deepwater Horizon, Macondo Well Blowout, and what we are facing in the Gulf**

Author 'SHR': <http://godlikeproductions.com/forum1/message1066057/pg1>

## **Part 1**

**11 May 2010**

I want to try and put in simple terms what we are facing as far as what is coming in this potentially catastrophic well blow out event. It's going to be a long post, but an important one, it is of critical importance if you are not fully aware as you can be of what is going on, what the action plan is and what is taking place, because this event may very well affect us all... as in GLOBAL. There is a lot of partial truths... a lot of falsehoods, a lot is not being said and a lot of lies are out there, I think we all see this... we all want some answers... we all want to have a grasp of what is happening. First of all, don't feel bad if you don't understand what is going on or feel sort of lost, this is an extremely complicated event. I hope I can inform people and give them some basic factual knowledge and I never ever mean to "Talk down" to anyone... I only want to inform and hope everyone that wishes to learn does learn... I also hope the "pros" fact check me and assure all that I do say is true and factual and if is not... then speak up... and also add in regardless.

With that being said I will try and instill the sense of urgency and seriousness that I personally feel about this... this is a bad one people... we are close... real close and all this is a very real, present and IMMINENT Danger. Trust me when I tell you that people who know are scared of this, it is THAT bad. People who deal with things that would scare most people half to death they deal with as a matter of course every single day... men who operate enormous machinery that most of us will never see or ever be around... I run and own some pretty big stuff... bigger and more powerful than cars or trucks, but the scale of some these oil and gas industry machines?... they dwarf these things... things so huge that most buildings cannot house them... literally gargantuan equipment and all that is associated with it, huge forces and the people who operate these monsters?... they are worried, very worried... and they rarely worry, if ever... and I am worried... which is also not the norm.

This is an edge of the abyss situation that we are facing in my opinion. Forget what you see now... this oil slick is minuscule in order of magnitude of what could happen... what is near to happening and what ABSOLUTELY WILL HAPPEN if it cannot be stopped. I cannot impress this enough... NEAR... because it truly is near. You probably sense it... know that this could go big... well it can... and although you might not understand exactly what is going on you can understand that we are not being told everything and it is difficult to form a clear picture. I hope to make some things clear and give people enough of an information handle to "get it".

### **First, "What happened":**

Simply put, this well had a "blow out". What that means is that explosive high pressure gas rose through the well pipe up from miles under the sea and the pressure blew off all the well control gear, valves etc. In this case... it also ignited and exploded, destroying the Deepwater Horizon drill rig and killed 11 men. The reasons for this are certainly complex and will be argued on a technical level, forensic examination and investigation will be done to the most minute detail and certainly some reasons will be found and likely some questions will still remain. Changes industry wide will be implemented etc etc but all anyone needs to know right now is that this well system failed in some way to handle the immense pressure of the gas that infiltrated the well system... and all, or enough, of the complex safety systems failed. There will be time for blame later, there is an urgent matter at hand and what I want to focus on is what is left, what is happening and what is being done about it...

What is left of the well system and what is down there:

The well system doesn't really begin at the bottom or the top of the system itself. Where it really begins is at the well head which is the interface of the earth and the hole in the ground. The drill system goes up... the well bore system goes down... I call them systems because they are complex animals... the actual complexity is something not to be concerned with right now... but it is at that interface where the battle of

man vs earth really begins.

Fighting earth is pretty simple... oil or gas... which man wants... mostly under massive pressures and in this case, very much so... held far away in a cavity, tucked away where earth can easily hold it under these enormous pressures... fighting man above?... not so simple... because we must use complex machines, valves and pumps etc etc to create our own pressure to combat earth and drive through and pierce that cavity and take the oil and gas. We create incredible pressures with dense fluids (mud) to equalize what earth does naturally... when they become out of balance?... we lose the fight... earth beats us and it shoots the "product" and we go boom or splash. To combat this if it does happen, we use what is called a "Blow Out Preventer" or BOP for short... this is one of the few pieces left down there now and it attaches to well head... it's our first line of defense... and this is the "safety system" that you hear failed in this instance...

A subsea BOP is not a minor piece of equipment that might be merely the size of your refrigerator or a truck... in fact the one down there now is 60 feet tall and weighs 450 tons... that's 6 stories tall easy and it is a massive piece of equipment... to give you all an idea?... I have some pictures of one that is probably an exact copy of the one on this well. Same company made it... and it's on a very similar site with almost identical specs... so this will be almost exactly it... right down to the "Yellow pod" which is its control/brain... it's a huge piece of complex gear... here is what one looks like...

*LMRP separated to transport:*



*All together on a flat bed truck:*



The BOP is like a big hollow assembly "Stack" with hydraulics attached to it that fire big sharp piece of steel called shear rams across the hollow that can snip the drill pipe clean off and seal the hollow shaft, like a dog nail clipper, but it stays closed.

The drill goes through the BOP assembly which really consists of two pieces... the BOP and LMRP... "Lower Marine Riser Package" the LMRP sits on top of the BOP which is what the "Riser" attaches too and they are both hollow stack ups with rams that fire to seal the well off.

The "Riser" is a very large and thick steel hollow tube that "rises" to the surface and attaches to drilling equipment. The drill goes through the Riser... then the LMRP... and then the BOP... enters the earth and drills down. The drill is also hollow because it makes it lighter... so when you hear "Drill pipe"... it is because the long drill "shaft" is really a hollow pipe with a drill bit on the end. You have probably heard these terms used a lot lately, so now you know basically what they are.

All 3 pieces do remain on the sea floor, although not fully intact or workable as to what they were made for... and all 3 come into play as to what is now happening... and what will happen.

I will base the following on the facts as presented to me as I know them to be real and true.

What happened when the well blew out was that the BOP failed to close... it should have snipped off the drill pipe and we wouldn't be here... but it didn't... I believe it tried to... but it didn't have the power to or something went wrong... I believe it is partially closed and perhaps squished the drill pipe some and is helping to restrict the flow... no one outside of BP really knows and maybe they even don't... but it failed for whatever reason... So the well blows up gas and oil... then explodes on the rig... 2 days later the rig sinks... the well is blowing gas and oil up the whole time. When the rig sinks, the riser pipe is still attached to both the BOP and the rig, the drill pipe is still inside the riser pipe... a pipe inside a pipe... it gets all bent up and twisted as the entire rig falls to the sea floor... sometime along the way down the riser and drill pipe inside it break off from the wreckage somewhere along that 5000 foot long pipe. It snaps apart and oil and gas start gushing out the end opposite the BOP. The portions closer to the well BOP are bent up from the crash and the end attached to the BOP assembly?... stays attached, but it is bent

over... the rig wreckage comes to rest on sea floor about 1500 feet away from the well, no longer connected to it... the pipes still attached to the well are gushing out oil even though it's mostly "kinked" up like a bent up garden hose and damaged...

And now... begins the fight against the open leaking well...

So of course this is a disaster... but BP owns a leaking well so they must act on that. They deploy ROVs to see what is going on... but I'm sure they already know... they have an out of control well at 5000 feet deep in the Gulf that is gushing oil... it's only a matter of "How bad"... at first it might not have been "real bad"... but it is now... and I will tell you why later... so BP tries to close the BOP again with ROVs hitting failsafe dead kill valves... they fail... they cannot close the BOP rams... maybe the drill pipe is bent to hell in there... maybe it's just too weak or damaged now, maybe it's a bad build... but it won't close... and it would appear they have given up trying... The whole time... oil and gas is rushing through as much as all the restrictions allow, those restrictions being the kinks in the hose... the maybe squished up pipe inside the BOP and the partially closed snip system... but it is gushing oil and gas through under the high pressures of the well... leaking out causing the "oil slick spill"... but this is far from the only problem...

Oil as it comes up from the earth is not exactly "clean"... in fact... it has a fair amount of crud in it... sand, hydrocarbons, other solids... and these impurities, they are abrasive... just like sand paper... or more like a "Sand blaster" in this case... so this abrasive mix of oil, crud and gas is rushing through the steel tubing and the machinery of the BOP under enormous virtually inexhaustible pressure... and it's chewing away the steel pipes and parts that are holding it back from rushing more... wherever there is a kink or something in the way?... there is the force of the abrasive fluid slowly eating it, wearing it away, same for whatever leak that has high pressure fluid blasting through it... which may not be the ones you see, but ones inside what is left of the pipes that the fluid is really shooting out of or past.

So the "Leaks" get bigger because they are being eroded away, when

that happens?... more fluid gushes past and they get eaten more, the faster it can leak, the more it will eat, the more it chews away, the faster it goes like a dam made of ice slowly but surely melting... and it will eventually go faster and faster until all the parts are worn thin enough that they will fail and explode off and the gusher will be more and more open... until it's wide open... no restrictions... THAT is inevitable, it WILL happen if this well cannot be stopped from flowing, it is only a matter of time and how much time is only a guess... but one thing that is certain... it will continue to gush more and more until it does eat everything away and is wide open.

Right now there are guesses as to how much flow is actually gushing out, but suffice to say... it's a lot... there are figures from 5,000 Barrels Per Day [BPD] to 100,000 BPD... some are from video analysis of the "Plume video", some are from surface area calculations of the "Seen oil" slick... but even BP says they are all just guesses and even they are not sure... but take for example a low range number... like 10,000 BPD... next week it will be 15,000 BPD... +5k... next 25,000 BPD... +10k... next 40,000 BPD... +15k... and will increase in a geometric progression until it is wide open... estimates of that wide open flow rate are also guesses but IMO it could easily be 100,000 BPD if it blows out completely... and IT WILL BLOW OUT COMPLETELY if it cannot be halted or if for some reason nature slows or stops, which is highly unlikely. Even if there is 25% gas it is still 75k BPD of oil... over 3 million gallons per day... a couple of Exxon Valdez spills PER WEEK... and I used conservative numbers as you see... so it could easily do much worse... in fact my estimate could be the "Best case"... as bad as it is. The "Gas" escaping presents a whole other set of problems which depending on how much gas could escape might even be worse... but for another thread... Right now it is overall flow and mixed "Product" gushing out... and nothing in this flow is good for anything.

So there are really only 3 major pieces left... the BOP assembly bolted to the well head, the Riser pipe which is a 21" diameter steel tube with 1 1/2" thick walls and the drill pipe laying inside it... both pipes broken off laying on the sea floor gushing out fluid. There were 3 "leaks"... now they say 2, because one was the drill pipe end which is broke off farther

away from the well head and is sticking out of the riser pipe, they capped that off, so it probably did not have a lot pressure in that leak, in fact BP said it did not decrease the flow... which makes sense if it is just broken off and laying inside the larger riser pipe, just held in by being bent up.

The 2nd leak we see in the "Plume video"... it is obvious the main flow is coming out the large riser pipe still attached to the BOP, but the "Other leak"... we are not getting any video of... and THAT one?... it is very likely that there is a lot more pressure there, it may be smaller and thus flowing less overall, but chances are it's blasting out a lot faster. This leak is where the pipe is bent over at the top of the BOP assembly and we have heard little about it, really just graphics with an illustration of something shooting out, but it is THAT leak, which MUST BE GROWING and is near the first bad kink over, that is probably where the Pipe which is being eroded will fail and be blown off the blow out protector... and THAT is inevitable... it WILL happen and is only a matter of time before it DOES HAPPEN.

Behind every restriction the pressure is greater than in front of it. Just like your garden hose swells up behind a kink... this is no different... so when that restriction blows away... the flow will increase greatly.

That is what they are up against... a broken BOP tower attached to the well head... a leaky bent pipe coming out of that... and a "corrosive" (abrasive) fluid under high pressure shooting out the leaks and eating it all away at the same time. The clock is truly ticking and the erosion of the components will not and cannot be stopped as long as it's flowing.

### **What are they doing to fight it:**

We have seen the cofferdams, outhouse, top hat both fail. Not surprising really, what happened was the large dome clogged with ice/hydrates... when the gas from the well shoots out it is very cold... the whole area is also under massive pressures because it is 5,000 feet below sea level which is about 2,200 pounds per square inch of pressure... everywhere... those are conditions under which these "hydrates" can form... and they



are forming, it is probably like a hydrate snow storm down there. Methane Hydrates are merely Crystal structures of methane gas trapped inside water ice. So the first "outhouse" got clogged with these ice structures they believe now because it too big, had too much seawater in it, so more chance to create ice... failed... left to the side on the sea floor... the next "Top Hat"... smaller size so less water to make ice... they also had hot water and anti-freeze pumping systems on both to stop ice formation... yesterday we learned that the "Top Hat" was "set back"... no explanation... also seems to be set aside like it just wouldn't work... today we learn that they intend to stick a smaller tube up inside the leaky pipe.

All 3 of these methods were never intended to, or ever could "Stop the Leaks". All they can do is suck up some of what has already leaked out using their 3 different methods. This is not a bad thing because it will gobble up as much oil as they can and that will be that much less that leaks out into the Gulf... how much less?... until they get one to actually function?... no one knows, but all 3 of these things are a sideline to the main problem and main mission, and THAT mission is to stop the leaks.

Here is a giant sized picture of what it ought to look like down there, it also shows the new "Tube insertion" sucker outer deal... whoopee!

<http://flickr.com/photos/deepwaterhorizonresponse/4601914103/sizes/o/in/photostream>

BP knows they have they have a ticking time bomb, and how many ticks we get?... is only a guess, but they are well aware that is a finite number... and it's counting down unrelentingly 24/7... if you noticed... BP had the BOP's brain removed... there is a reason for this... and believe me when I tell you this is their number one priority mission and all these sucker domes are more to make regular people feel good about less oil leakage, Yay! save Flipper and Tippy the Turtle!... but they are not the Alpha priority for the engineers whom are well aware that a far greater and inevitable danger looms... maybe why these measures seem half assed to us... likely because they are... and ultimately even if they did work?... they wouldn't have anything left to work on for long because

the riser pipe is going to be blown off the blow out protector and there won't be any oil shooting out the pipe laying on the sea bed... because it will no longer be attached to the well... BP has plenty of manpower and money so they can throw some at those things and it will make people glad to see that they are doing something... but that's all it is... the real mission is a technological challenge and is taking some time to setup... so if we all saw nothing happening?... people would be berserk by now... so you get some candy while you wait for the real thing...

The real missions are two approaches to the same thing, ultimately killing this well... sealing it off with cement and heavy fluids in the well's bore itself... that is the ultimate goal... and it's the only thing that will stop this...

The first part is the "relief" wells, these are long term long range solutions with a time frame of 90 days to drill the wells given to us... one was started on May 3rd... a second one should be started soon. They will intersect the existing well down at about 18,000 feet below the sea floor and through them they will pump in dense fluid and cement... and hope they clog it and seal it off from below... another Transocean deep water drill rig is there doing that now..

ROBERT, La. - The ultra-deepwater semisubmersible rig Development Drill III had begun operations for drilling a relief well Monday, May 3, 2010. A relief well is designed to drill down and intersect the existing well bore and pump heavy fluids and cement in to stop the leaking oil. Photo provided by Transocean.

<http://deepwaterhorizonresponse.com/go/doc/2931/538223>

They have released info that the first one was 9,000 feet down already... however... remember they have "turn" the drill... so to get 18,000 feet down and turn toward the existing well the actual length they must drill is longer... it also very tricky... they must hit the well bore that is there... it's been done before..; but it is not too easy and it will take time... and time is one thing that is slowly ticking away... and if the well does blow wide open, which is inevitable... I would guess the task of

clogging it becomes more difficult... because it rushes more fluid faster... they may have to wait for the second relief well to pierce through and capture more of the flow... I doubt anyone is really sure of what it might ultimately take, but in the only well blowout that was even close to this one, they did need 2 wells... and that one... was a weaker flow...

There was a blowout which was close to this... the IXTOC I blowout in the bay of Campeche in the Gulf of Mexico. However much is very different... and this blowout now is very unique. The IXTOC I blowout is the largest accident spill/leak in History. It leaked an estimated 3.3-3.5 Million Barrels of oil... 140 some odd Million Gallons. It flowed virtually full wide open for 9 months before they could stop it. They tried to close the BOP, but it started to rupture valves and they had to open it to prevent it from being destroyed and ripped out completely from the well head, which would have made the task of capping it much much more difficult. The IXTOC I well blew out oil and gas at a rate of 10,000 - 30,000 Barrels per day... we may perhaps be at that rate already at the Macondo blowout... I doubt anyone is sure, but easily possible. One thing which is very different is that IXTOC I happened in 50 meters of water... about 165 ft deep... this one is in over 5,000 feet of water... divers can easily reach 165 deep... this is impossible at 5,000 ft... so everything must be done with remotely operated subs... making the task of working around the well head far more difficult.

[http://industry-tac.org/media/technical\\_documents/in\\_situ\\_burning/nist\\_sp\\_995\\_volume1\\_general\\_information/Case\\_Histories/NOAA/IXTOCI.html](http://industry-tac.org/media/technical_documents/in_situ_burning/nist_sp_995_volume1_general_information/Case_Histories/NOAA/IXTOCI.html)

The second and most important "Plan" is the top kill... or so called "Junk Shot"... this the BP engineers have been quietly working on and for the most part, it has been away from the eyes of the media, but make no mistake people, this is THE MOST IMPORTANT THING THEY ARE DOING RIGHT NOW. From the little I can find about this they have removed the control brain from BOP, they did this so they can control some valves differently than how the stack was designed to control them. They have fabricated a "Manifold"... this is just a few pipes that can be shot into one depending on which one they choose to open, a multi-port type

apparatus. They intend to fire the "junk" into the choke and kill valve ports, which are at the very bottom of the entire BOP assembly. They are usually attached to the very top rams of the blow out preventer and if the giant sniper rams closed?... those posts send extreme pressure via heavy pipes to help seal off the BOP system by using the wells own pressure against itself... it's all part of the failsafe system... which failed.

So what they do is fire the "Junk shot" into the partially clogged already BOP through these valve ports... and hope it clogs it off a whole lot more or even completely, but clogged enough for them to mad dash pump kill fluids and cement down into the well, through the same ports ... if it works. The junk as silly as it sounds is made up of different sized pieces that can create the optimum "clogs"... yes it is hunks of old tires, golf balls, pieces of rope with knots in it and other stuff of all varying sizes and shapes... right now they are and have been trying to create the "recipe" that will work, and they will try several recipes until they either give up... or it works.

There are problems which may be associated with this... if the connection at the well opening where the BOP attaches is damaged?... it may fail, because the pressure is going to increase under the clogged BOP because it will be holding back more pressure... like a now working cork... and from the mechanics of this "Junk shot" really being almost irreversible... if it does begin to come unglued?... I doubt they could stop it, they might be able to open some valves and relieve the pressure... but all that leads to one thing... the whole well is even more open... blowing out more gush..

If the Top Kill/ junk shot / clogger fails to work... the only other short term remedy will be to literally saw off the top of the stack tower and try to attach an entire new BOP on top of the old busted one... that includes all the possible damage coming into play of course... and it also includes the whole thing being virtually wide open... because the entire riser pipe must be sawed off to do this. At that point if there is any busted up pipe inside the old BOP or chunks of crap, that may get blasted out... if the rams are partially out in the stream, they might get train wrecked... because they are worn already, they must be.

There is no doubt that some damage was done to the connection because 5000 feet of massive pipe was pushed, pulled, shoved and bent around when the whole thing came crashing down... how much damage or not or even if it is leaking there we are not being told, but 60 feet tall of 450 ton blow out preventer being pulled on by a 21" diameter heavy steel pipe with a gigantic ship on the other end is going flex and torque whatever it is connected to... that you can count on, whether it took it and is still ok, take a guess cause I don't know... I truly HOPE it's at least ok enough to handle the top kill shot... because if it isn't... we are in very serious trouble and no one is talking about the well casing run all the way down itself possibly being damaged anywhere along the way... if that happened?... then the whole thing could tear itself apart, blast out of the sea floor and there won't BE anything left to clog up... just a real deep hole that will get bigger and bigger blasting out more and more as it does... and who knows where that nightmare will take us... but you can count on it being nowhere good, that's for sure... it would guess it would be like nothing mankind has seen... because we might not survive that one... it's just that huge an unknown... a roaring hole into a massive oil and gas deposit... I doubt anyone can calculate where it would end, or how much damage would be done... but "LOTS" would be an understatement...

Anything after the top kill shots is desperation time, because the well will have to be opened up a whole lot more than it is now for anything else to be accomplished. If the riser is worn down and tears off before the top kill happens, that new BOP may take over the shot as the primary mission... they are prepared to some degree for this and there is a new BOP on the rig in position, that has been disclosed.

### **So this is the "Plan":**

Ongoing: drill relief wells the whole time.

1. Suck away what they can, if they can. This does NOTHING but remove "some" oil from entering the sea.

2. Top kill clog shot. If it works, they will pump in heavy "mud" and then cement immediately and the well will stop gushing, it will be effectively "Killed" sealed off, leak over. <<<PRAY THIS WORKS!

3. New BOP install. Saw the top off. If they get to this point the well is blowing out far more than it is now. They will have to put the new unit in place through that raging stream... via remote subs... a very very difficult task to be sure. This is desperation time...

4. Relief wells connect and pump in fluid and cement and kill the well from 18,000 feet down... if they can, still a challenge... 90 days out minimum from may 3rd when the first well began. They should be able to slow down the flow even if they cannot kill it with one well... the second well is 90 days away from... Sunday May 16th..

That's it guys... it's all we got and the situation is dire... aside from the extreme possibilities like exploding a massive charge to crush the thing closed... and THAT IS being discussed... if it takes an atomic bomb to do it?... we may very well face a situation THAT desperate... this thing is an almost unimaginably powerful monster that we have just stabbed with a knife and spit in the face of... and it's in a very weak cage, it doesn't sleep, it doesn't need to eat and it only gets stronger and more fierce as time goes by... it's going berserk and it's wrecking its cage, tearing at it, screaming, bolts starting to pop loose and it's not going stop smashing and bashing anytime soon... oh and btw someone just handcuffed you to the bars and you cannot get away now.

I say this because the amount, the insane volumes, of gas and oil that could be released if this thing blows apart are truly of nightmare proportions... this one isn't in the south western gulf like the IXTOC blowout was... the GOM is sort of separated into two portions and the western side is sort of trapped... the Eastern side is not and the "Loop current" which connects to the "Gulf Stream" flows right through this side... it will carry the oil spillage out into the Gulf stream and all the way up the eastern seaboard all the way to the UK and Europe where it ends. There will be who knows how many cubic feet of gas released into the atmosphere and the surrounding area with an untold amount of

toxins... the economic implications are dire... the fishing industry annihilated, beaches and tourism to them destroyed... and who knows what other effects there will be... it's a very very bad disaster to say the least... it's bad enough NOW... and THIS IS NOTHING COMPARED TO WHAT MAY HAPPEN... and WILL HAPPEN if they cannot stop this thing... you must get your head around that, nothing will stop this from blowing apart and going wide open if the rush of fluids cannot be halted, it is a CERTAINTY.

It's beyond our control as regular citizens really... we ALL should be screaming at our leaders that we do realize the consequences and to take this seriously... and I mean like War footing seriously, because it could get that bad... we can and should be aware of the historic nature of this thing because it IS being downplayed in the media... it could create mass panic if people really knew... and it still might if it does blow apart because there won't be any booms, any sucker hats or tubes or anything else that is going to do jack shit to stop it... it'll be like trying to blow a tidal wave away with a soda straw and everyone will become even more aware of just how weak and puny Man is compared to the forces of nature. If the well does cut loose? we are talking thousands and thousands of square miles of toxic crud... I'm not even sure the well drilling rigs would even be able to operate in the area... a massive rush of gas can sink ships... the gas is not breathable and it's Explosive too... One thunder storm comes by and a lightning strike?... BOOM... I'm sure the men working there realize they are probably in one the most hazardous work zones they have ever been in... I don't think it's an ELE or something of that order, but we don't need to be wiped out to be stuck enjoying a giant bowl of SUCK... for a very long time...

And all the while?... the wear out, blow apart countdown timer is ticking away on a huge time bomb that WILL go off, but no one knows when... and they are racing against it and it never stops ticking away... I truly hope we win that race...

I am telling you all this so that you will understand what we face... and also so that if you live near the Gulf you can make preparations for the possibilities... which could be incredibly bad... panic evacs or just plain

mass panic, badass noxious fumes or worse... I guarantee that NO ONE knows for sure.

They really only have one shot here... and that is the top kill. Watch for it and pay attention. Be aware what this all means to ALL OF US, and I hope I explained things well enough to be understood by anyone. The top kill shot should be coming soon... I hope... as soon as possible. If you hear it failed... or if the well blew itself apart before they can do it... get the f\*\*\* ready, because Pandora's box is about to open wide and the closest thing to the SHTF for real that we will likely see in our lifetimes is about come charging out at full rampant force. And it's a very large and deep box.

Godspeed people...



**Part 2****12 June 2010**

<http://godlikeproductions.com/forum1/message1097505/pg1>

In the first part of my post "BP Deep water horizon, Macondo Well Blowout and what we are facing in the Gulf" I tried to address the mechanics of the general well situation and explain some of terminology of the oil and gas industry. I also tried to lay out some of the various "plans" that were going to happen in the near future at the time of writing. I received a lot of thanks from people who took away a greater understanding of what was happening which I am very grateful for and hope that many more did gain understanding.

Most if not all of those plans have come to pass, there have also been several other developments. In this post I will update the situation as I see it and as I can conclude from the disjointed trickle of information that has been released and which has not been made fully clear to the public.

In my opinion BP and our Government have not been forthcoming about what is really is going on with this well and the situation we will likely face. Understandably they would not want to create panic, but we also need to prepare for this oil leak getting worse, ignoring the reality that there is good chance it will get worse leaves us vulnerable. Just like we shutter up before a hurricane we should be preparing now because we know that if we don't, we are going to sustain far more damage than if we did.

I'm not going to get into the oil remediation aspect or the control of the already released oil nor the politics involved in the overall situation other than to say we need to prepare for the worst and should be doing that now. I want to cover the mechanics of what is going on now at the well subsea and what has happened and what the results tell us. Since we are not getting very much clear information about what those results or lack of results mean, I think it's important for everyone to know what is happening and the possibilities of what may come.

As you have probably seen and maybe feel yourselves, there are several things that do not appear to make sense regarding the actions of attack against the well. Don't feel bad, there is much that doesn't make sense even to professionals unless you take into account some important variables that we are not being told about. There seems to me to be a reluctance to face what cannot be termed anything less than grim circumstances in my opinion. There certainly is a reluctance to inform us regular people and all we have really gotten is a few dots here and there... in this post I hope to connect some of those dots and show where we are headed...

First of all... set aside all your thoughts of plugging the well and stopping it from blowing out oil using any method from the top down. Plugs, big valves to just shut it off, pinching the pipe closed, installing a new BOP or LMRP, shooting any epoxy in it, top kills with mud etc etc etc... forget that, it won't be happening... it's done and over. In fact actually opening up the well at the subsea source and allowing it to gush more is not only exactly what has happened, it was probably necessary, or so they think anyway.

So you have to ask WHY? Why make it worse?... there really can only be one answer and that answer does not bode well for all of us. It's really an inescapable conclusion at this point, unless you want to believe that every Oil and Gas professional involved suddenly just forgot everything they know or woke up one morning and drank a few big cups of stupid and got assigned to directing the response to this catastrophe. Nothing makes sense unless you take this into account, but after you do... you will see the "sense" behind what has happened and what is happening. That conclusion is this:

*The well bore structure is compromised "Down hole".*

That is something which is a "Worst nightmare" conclusion to reach. While many have been saying this for some time as with any complex disaster of this proportion many have "said" a lot of things with no real sound reasons or evidence for jumping to such conclusions, well this time it appears that they may have jumped into the right place... I will

show you why this conclusion is inescapable and why the real evidence points to it.

### **TOP KILL - FAILS:**

When I said in my first post "Pray this works" I meant it, it didn't work. This was probably our best and only chance to kill this well from the top down. This "kill mud" is a tried and true method of killing wells and usually has a very good chance of success. The depth of this well presented some logistical challenges, but it really should not of presented any functional obstructions. The pumping capacity was there and it would have worked, should have worked, but it didn't.

It didn't work, but it did create evidence of what is really happening. First of all the method used in this particular top kill made no sense, did not follow the standard operating procedure used to kill many other wells and in fact for the most part was completely contrary to the procedure which would have given it any real chance of working.

When a well is "Killed" using this method heavy drill fluid "Mud" is pumped at high volume and pressure into a leaking well. The leaks are "behind" the point of access where the mud is fired in, in this case the "choke and Kill lines" which are at the very bottom of the BOP (Blow Out Preventer) The heavy fluid gathers in the "behind" portion of the leaking well assembly, while some will leak out, it very quickly overtakes the flow of oil and only the heavier mud will leak out. Once that "solid" flow of mud is established at the leak "behind" the well, the mud pumps increase pressure and begin to overtake the pressure of the oil deposit. The mud is established in a solid column that is driven downward by the now stronger pumps. The heavy mud will create a solid column that is so heavy that the oil deposit can no longer push it up, shut off the pumps... the well is killed... it can no longer flow.

Usually this will happen fairly quickly, in fact for it to work at all... it must happen quickly. There is no "trickle some mud in" because that is not how a top kill works. The flowing oil will just flush out the trickle and

a solid column will never be established. Yet what we were told was "It will take days to know whether it worked"... "Top kill might take 48 hours to complete"... the only way it could take days is if BP intended to do some "test fires" to test integrity of the entire system. The actual "kill" can only take hours by nature because it must happen fairly rapidly. It also increases strain on the "behind" portion and in this instance we all know that what remained was fragile at best.

Early that afternoon we saw a massive flow burst out of the riser "plume" area. This was the first test fire of high pressure mud injection. Later on same day we saw a greatly increased flow out of the kink leaks, this was mostly mud at that time as the kill mud is tannish color due to the high amount of Barite which is added to it to weight it and Barite is a white powder. Here is what Barite looks like:

[http://ecplaza.net/tradeleads/seller/5481904/api\\_13\\_a\\_grade\\_barite.html](http://ecplaza.net/tradeleads/seller/5481904/api_13_a_grade_barite.html)

We later learned the pumping was shut down at midnight, we weren't told about that until almost 16 hours later, but by then... I'm sure BP had learned the worst. The mud they were pumping in was not only leaking out the "behind" leaks... it was leaking out of someplace forward... and since they were not even near being able to pump mud into the deposit itself, because the well would be dead long before... and the oil was still coming up, there could only be one conclusion... the wells casings were ruptured and it was leaking "down hole"

They tried the "Junk shot"... the "bridging materials" which also failed and likely made things worse in regards to the ruptured well casings.

"Despite successfully pumping a total of over 30,000 barrels of heavy mud, in three attempts at rates of up to 80 barrels a minute, and deploying a wide range of different bridging materials, the operation did not overcome the flow from the well."

<http://bp.com/genericarticle.do?categoryId=2012968&contentId=7062487>

80 Barrels per minute is over 200,000 gallons per hour, over 115,000 barrels per day... did we see an increase over and above what was already leaking out of 115k bpd?... we did not... it would have been a massive increase in order of multiples and this did not happen.

"The whole purpose is to get the kill mud down," said Wells. "We'll have 50,000 barrels of mud on hand to kill this well. It's far more than necessary, but we always like to have backup."

<http://chron.com/disp/story.mpl/business/deepwaterhorizon/7006870.html>

"The "top kill" effort, launched Wednesday afternoon by industry and government engineers, had pumped enough drilling fluid to block oil and gas spewing from the well, Allen said. The pressure from the well was very low, he said, but persisting."

"Allen said one ship that was pumping fluid into the well had run out of the fluid, or "mud," and that a second ship was on the way. He said he was encouraged by the progress."

<http://houmatoday.com/article/20100527/ARTICLES/100529348>

Later we found out that Allen had no idea what was really going on and had been "Unavailable all day".

[http://realclearpolitics.com/articles/2010/05/27/interview\\_with\\_coast\\_guard\\_admiral\\_thad\\_allen\\_105775.html](http://realclearpolitics.com/articles/2010/05/27/interview_with_coast_guard_admiral_thad_allen_105775.html)

So what we had was BP running out of 50,000 barrels of mud in a very short period of time. An amount far and above what they deemed necessary to kill the well. Shutting down pumping 16 hours before telling anyone, including the president. We were never really given a clear reason why "Top Kill" failed, just that it couldn't overcome the well.

There is only one article anywhere that says anything else about it at

this time of writing... and it's a relatively obscure article from the Wall Street Journal "online" edition citing an unnamed source.

*"WASHINGTON — BP PLC has concluded that its "top-kill" attempt last week to seal its broken well in the Gulf of Mexico may have failed due to a malfunctioning disk inside the well about 1,000 feet below the ocean floor.*

*The disk, part of the subsea safety infrastructure, may have ruptured during the surge of oil and gas up the well on April 20 that led to the explosion aboard the Deepwater Horizon rig, BP officials said. The rig sank two days later, triggering a leak that has since become the worst in U.S. history.*

*The broken disk may have prevented the heavy drilling mud injected into the well last week from getting far enough down the well to overcome the pressure from the escaping oil and gas, people familiar with BP's findings said. They said much of the drilling mud may also have escaped from the well into the rock formation outside the wellbore.*

*As a result, BP wasn't able to get sufficient pressure to keep the oil and gas at bay. If they had been able to build up sufficient pressure, the company had hoped to pump in cement and seal off the well. The effort was deemed a failure on Saturday.*

*BP started the top-kill effort Wednesday afternoon, shooting heavy drilling fluids into the broken valve known as a blowout preventer. The mud was driven by a 30,000 horsepower pump installed on a ship at the surface. But it was clear from the start that a lot of the "kill mud" was leaking out instead of going down into the well."*

<http://online.wsj.com/article/SB10001424052748704875604575280133577164268.html>

There are some inconsistencies with this article.

There are no "Disks" or "Subsea safety structure" 1,000 feet below the

sea floor, all that is there is well bore. There is nothing that can allow the mud or oil to "escape" into the rock formation outside the well bore except the well, because it is the only thing there.

All the actions and few tidbits of information all lead to one inescapable conclusion. The well pipes below the sea floor are broken and leaking. Now you have some real data of how BP's actions are evidence of that, as well as some murky statement from "BP officials" confirming the same.

I took some time to go into a bit of detail concerning the failure of Top Kill because this was a significant event. To those of us outside the real inside loop, yet still fairly knowledgeable, it was a major confirmation of what many feared. That the system below the sea floor has serious failures of varying magnitude in the complicated chain, and it is breaking down and it will continue to.

### **What does this mean?**

It means they will never cap the gusher after the wellhead. They cannot... the more they try and restrict the oil gushing out the BOP?... the more it will transfer to the leaks below. Just like a leaky garden hose with a nozzle on it. When you open up the nozzle?... it doesn't leak so bad, you close the nozzle?... it leaks real bad, same dynamics. It is why they sawed the riser off... or tried to anyway... but they clipped it off, to relieve pressure on the leaks "down hole". I'm sure there was a bit of panic time after they crimp/pinched off the large riser pipe and the Diamond wire saw got stuck and failed... because that crimp diverted pressure and flow to the rupture down below.

Contrary to what most of us would think as logical to stop the oil mess, actually opening up the gushing well and making it gush more became direction BP took after confirming that there was a leak. In fact if you note their actions, that should become clear. They have shifted from stopping or restricting the gusher to opening it up and catching it. This only makes sense if they want to relieve pressure at the leak hidden down below the seabed... and that sort of leak is one of the most

dangerous and potentially damaging kind of leak there could be. It is also inaccessible which compounds our problems. There is no way to stop that leak from above, all they can do is relieve the pressure on it and the only way to do that right now is to open up the nozzle above and gush more oil into the gulf and hopefully catch it, which they have done, they just neglected to tell us why, gee thanks.

A down hole leak is dangerous and damaging for several reasons. There will be erosion throughout the entire beat up, beat on and beat down remainder of the "system" including that inaccessible leak. The same erosion I spoke about in the first post is still present and has never stopped, cannot be stopped, is impossible to stop and will always be present in and acting on anything that is left which has crude oil "Product" rushing through it. There are abrasives still present, swirling flow will create hot spots of wear and this erosion is relentless and will always be present until eventually it wears away enough material to break its way out. It will slowly eat the BOP away especially at the now pinched off riser head and it will flow more and more. Perhaps BP can outrun or keep up with that out flow with various suckage methods for a period of time, but eventually the well will win that race, just how long that race will be?... no one really knows. However now?... there are other problems that a down hole leak will and must produce that will compound this already bad situation.

This down hole leak will undermine the foundation of the seabed in and around the well area. It also weakens the only thing holding up the massive Blow Out Preventer's immense bulk of 450 tons. In fact?... we are beginning to see the results of the well's total integrity beginning to fail due to the undermining being caused by the leaking well bore.

The first layer of the sea floor in the gulf is mostly loose material of sand and silt. It doesn't hold up anything and isn't meant to, what holds the entire subsea system of the BOP in place is the well itself. The very large steel connectors of the initial well head "spud" stabbed in to the sea floor. The BOP literally sits on top of the pipe and never touches the sea bed, it wouldn't do anything in way of support if it did. After several tens of feet the seabed does begin to support the well connection laterally



(side to side) you couldn't put a 450 ton piece of machinery on top of a 100' tall pipe "in the air" and subject it to the side loads caused by the ocean currents and expect it not to bend over... unless that pipe was very much larger than the machine itself, which you all can see it is not. The well's piping in comparison is actually very much smaller than the Blow Out Preventer and strong as it may be, it relies on some support from the seabed to function and not literally fall over... and it is now showing signs of doing just that... falling over.

If you have been watching the live feed cams you may have noticed that some of the ROVs are using an inclinometer... and inclinometer is an instrument that measures "Incline" or tilt. The BOP is not supposed to be tilting... and after the riser clip off operation it has begun to... as evidenced in these pictures. I'm not going put in a lot of pics because this post is long enough already.





This is not the only problem that occurs due to erosion of the outer area of the well casings. The way a well casing assembly functions is that it is an assembly of different sized "tubes" that decrease in size as they go down. These tubes have a connection to each other that is not unlike a click or snap together locking action. After a certain length is assembled they are cemented around the outside to the earth that the more rough drill hole is bored through in the well making process. A very well put together and simply explained process of "How to drill a deep water oil well" is available here:

<http://treesfullofmoney.com/?p=1610>

The well bore casings rely on the support that is created by the cementing phase of well construction. Just like if you have many hands holding a pipe up you could put some weight on the top and the many hands could hold the pipe and the weight on top easily... but if there were no hands gripping and holding the pipe?... all the weight must be held up by the pipe alone. The series of connections between the sections of casings are not designed to hold up the immense weight of the BOP without all the "hands" that the cementing provides and they will eventually buckle and fail when stressed beyond their design limits.

These are clear and present dangers to the battered subsea safety structure (BOP and LMRP) which is the only loose cork on this well we have left. The immediate (first 1,000 feet) of well structure that remains is now also undoubtedly compromised. However... as bad as that is?... it is far from the only possible problems with this very problematic well. There were ongoing troubles with the entire process during the drilling of this well. There were also many compromises made by BP in my opinion which may have resulted in an overall weakened structure of the entire well system all the way to the bottom plug which is over 12,000 feet deep. Problems with the cementing procedure which was done by Halliburton and was deemed as "against our best practices" by a Halliburton employee on April 1st weeks before the well blew out. There is much more and I won't go into detail right now concerning the lower end of the well and the troubles encountered during the whole creation of this well and earlier "Well control" situations that were revealed in

various internal BP e-mails. I will add several links to those documents and quotes from them below and for now, address the issues concerning the upper portion of the well and the region of the sea floor.

### **What is likely to happen now?**

Well... none of what is likely to happen is good, in fact... it's about as bad as it gets. I am convinced the erosion and compromising of the entire system is accelerating and attacking more key structural areas of the well, the Blow Out Preventer and surrounding strata holding it all up and together. This is evidenced by the tilt of the Blow Out Preventer and the erosion which has exposed the well head connection. What eventually will happen is that the Blow Out Preventer will literally tip over if they do not run supports to it as the currents push on it. I suspect they will run those supports as cables tied to anchors very soon, if they don't, they are inviting disaster that much sooner.

Eventually even that will be futile as the well casings cannot support the weight of the massive system above with out the cement bond to the earth and that bond is being eroded away. When enough is eroded away the casings will buckle and the BOP will collapse the well. If and when you begin to see oil and gas coming up around the well area from under the BOP? or the area around the well head connection and casing sinking more and more rapidly? ... it won't be too long after that the entire system fails. BP must be aware of this, they are mapping the sea floor sonically and that is not a mere exercise. Our government must be well aware too, they just are not telling us.

All of these things lead to only one place, a fully wide open well bore directly to the oil deposit... after that, it goes into the realm of "the worst things you can think of". The well may come completely apart as the inner liners fail. There is still a very long drill string in the well, that could literally come flying out... as I said... all the worst things you can think of are a possibility, but the very least damaging outcome as bad as it is, is that we are stuck with a wide open gusher blowing out 150,000 barrels a day of raw oil or more. There isn't any "cap dome" or any other suck fixer device on earth that exists or could be built that will stop it

from gushing out and doing more and more damage to the gulf. While at the same time also doing more damage to the well, making the chance of halting it with a kill from the bottom up less and less likely to work, which as it stands now?... is the only real chance we have left to stop it all.

It's a race now... a race to drill the relief wells and take our last chance at killing this monster before the whole weakened, wore out, blown out, leaking and failing system gives up its last gasp in a horrific crescendo.

We are not even 2 months into it, barely half way by even optimistic estimates. The damage done by the leaked oil now is virtually immeasurable already and it will not get better, it can only get worse. No matter how much they can collect, there will still be thousands and thousands of gallons leaking out every minute, every hour of every day. We have 2 months left before the relief wells are even near in position and set up to take a kill shot and that is being optimistic as I said.

Over the next 2 months the mechanical situation also cannot improve, it can only get worse, getting better is an impossibility. While they may make some gains on collecting the leaked oil, the structural situation cannot heal itself. It will continue to erode and flow out more oil and eventually the inevitable collapse which cannot be stopped will happen. It is only a simple matter of who can "get there first"... us or the well.

We can only hope the race against that eventuality is one we can win, but my assessment I am sad to say is that we will not.

The system will collapse or fail substantially before we reach the finish line ahead of the well and the worst is yet to come.

Sorry to bring you that news, I know it is grim, but that is the way I see it... I sincerely hope I am wrong.

We need to prepare for the possibility of this blow out sending more oil into the gulf per week than what we already have now, because that is what a collapse of the system will cause. All the collection efforts that

have captured oil will be erased in short order. The magnitude of this disaster will increase exponentially by the time we can do anything to halt it and our odds of actually even being able to halt it will go down.

The magnitude and impact of this disaster will eclipse anything we have known in our life times if the worst or even near worst happens...

We are seeing the puny forces of man vs the awesome forces of nature.

We are going to need some luck and a lot of effort to win...  
and if nature decides we ought to lose, we will...

Godspeed, we surely need it...

>>>>>

### **Reference materials:**

On April 1, a job log written by a Halliburton employee, Marvin Volek, warns that BP's use of cement "was against our best practices."

An April 18 internal Halliburton memorandum indicates that Halliburton again warned BP about its practices, this time saying that a "severe" gas flow problem would occur if the casings were not centered more carefully.

Around that same time, a BP document shows, company officials chose a type of casing with a greater risk of collapsing.

[http://nytimes.com/2010/06/06/us/06rig.html?pagewanted=1&sq=at\\_is\\_sue\\_in\\_gulf&st=cse&scp=1](http://nytimes.com/2010/06/06/us/06rig.html?pagewanted=1&sq=at_is_sue_in_gulf&st=cse&scp=1)



Mark Hafle, the BP drilling engineer who wrote plans for well casings and cement seals on the Deepwater Horizon's well, testified that the well had lost thousands of barrels of mud at the bottom. But he said models run onshore showed alterations to the cement program would resolve the issues, and when asked if a cement failure allowed the well to "flow" gas and oil, he wouldn't capitulate.

Hafle said he made several changes to casing designs in the last few days before the well blew, including the addition of the two casing liners that weren't part of the original well design because of problems where the earthen sides of the well were "ballooning." He also worked with Halliburton engineers to design a plan for sealing the well casings with cement.

[http://nola.com/news/gulf-oil-spill/index.ssf/2010/05/hearings\\_bp\\_cementing\\_engineer.html](http://nola.com/news/gulf-oil-spill/index.ssf/2010/05/hearings_bp_cementing_engineer.html)

Graphic of fail

[http://media.nola.com/news\\_impact/other/oil-cause-050710.pdf](http://media.nola.com/news_impact/other/oil-cause-050710.pdf)

Spill image

[http://s.wsj.net/public/resources/images/OB-IR767\\_0601oi\\_G\\_20100601141628.jpg](http://s.wsj.net/public/resources/images/OB-IR767_0601oi_G_20100601141628.jpg)

[http://glossary.oilfield.slb.com/Display.cfm?Term=float shoe](http://glossary.oilfield.slb.com/Display.cfm?Term=float+shoe)

<http://glossary.oilfield.slb.com/files/OGL00014.gif>

Casing joint

<http://glossary.oilfield.slb.com/files/OGL00001.gif>

Casing

<http://glossary.oilfield.slb.com/files/OGL00003.gif>

Kill may take until Christmas

<http://bloomberg.com/apps/news?pid=20601087&sid=aPffTgqayIKY&pos=9>

BP Used Riskier Method to Seal Well Before Blast

<http://nytimes.com/2010/05/27/us/27rig.html>

BP memo test results

[http://energycommerce.house.gov/Press\\_111/20100512/Internal.BP.Email.Regarding.Negative.Test.Results.pdf](http://energycommerce.house.gov/Press_111/20100512/Internal.BP.Email.Regarding.Negative.Test.Results.pdf)

Investigation results

The information from BP identifies several new warning signs of problems. According to BP there were three flow indicators from the well before the explosion.

<http://energycommerce.house.gov/documents/20100525/Memo.BP.Internal.Investigation.pdf>

BP, what we know

<http://energycommerce.house.gov/documents/20100512/BP-What.We.Know.pdf>

What could have happened

1. Before or during the cement job, an influx of hydrocarbon enters the wellbore.
2. Influx is circulated during cement job to wellhead and BOP.
3. 9-7/8" casing hanger packoff set and positively tested to 6500 psi.
4. After 16.5 hours waiting on cement, a negative test performed on wellbore below BOP.



(~ 1400 psi differential pressure on 9-7/8" casing hanger packoff and ~ 2350 psi on double valve float collar)

5. Packoff leaks allowing hydrocarbon to enter wellbore below BOP. 1400 psi shut in pressure observed on drill pipe (no flow or pressure observed on kill line)
  6. Hydrocarbon below BOP is unknowingly circulated to surface while finishing displacing the riser.
  7. As hydrocarbon rises to surface, gas break out of solution further reduces hydrostatic pressure in well. Well begin to flow, BOPs and Emergency Disconnect System (EDS) activated but failed.
  8. Packoff continues to leak allowing further influx from bottom.
- Confidential

<http://energycommerce.house.gov/documents/20100512/BP-What.Could.Have.Happened.pdf>

T/A daily log 4-20

<http://energycommerce.house.gov/documents/20100512/TRO-Daily.Drilling.Report.04.20.2010.pdf>

Cement plug 12,150 ft SCMT logging tool  
SCMT (Slim Cement Mapping Tool)  
Schlumberger Partial CBL done.

<http://energycommerce.house.gov/documents/20100530/BP-HZN-CEC018441.pdf>

Schlum CBL tools

[http://slb.com/~media/Files/production/product\\_sheets/well\\_integrity/cement\\_bond\\_logging\\_tools.ashx](http://slb.com/~media/Files/production/product_sheets/well_integrity/cement_bond_logging_tools.ashx)

Major concerns, well control, BOP test.

<http://energycommerce.house.gov/documents/20100530/BP-HZN-CEC018375.pdf>

Energy & commerce links to docs.

[http://energycommerce.house.gov/index.php?option=com\\_content&view=article&id=1985:energy-a-commerce-committee-investigates-deepwater-horizon-rig-oil-spill&catid=122:media-advisories&Itemid=55](http://energycommerce.house.gov/index.php?option=com_content&view=article&id=1985:energy-a-commerce-committee-investigates-deepwater-horizon-rig-oil-spill&catid=122:media-advisories&Itemid=55)

Well head on sea floor

[http://nca-group.com/bilder//Trolla/A. GVI of Trolla prior to WHP002 \(2\).jpg](http://nca-group.com/bilder//Trolla/A. GVI of Trolla prior to WHP002 (2).jpg)

Well head on deck of ship

[http://nca-group.com/bilder//Trolla/DSC\\_0189.jpg](http://nca-group.com/bilder//Trolla/DSC_0189.jpg)

BP's YouTube propaganda page, a lot of rarely seen videos here...

<http://youtube.com/user/DeepwaterHorizonJIC>