

From: William Burch

Sent: Saturday, April 24, 2010 4:40 PM

To: Mix, Kurt

Subject: Possible Failure Paths for 7" x 9-7/8" Casing Annulus Flow
Possible Failure Paths for 7" x 9-7/8" Casing Annulus Flow:

1. Up 7" x 9-7/8" casing annulus to 22" casing
 - Not likely - pressure with seawater backup > 8200 psi
2. Up 7" x 9-7/8" casing annulus to 16" burst disk at 6,047 ft
 - Not likely - pressure with seawater backup > 10200 psi
3. Up 7" x 9-7/8" casing annulus to 16" burst disk at 8,304 ft
 - Not likely - pressure with seawater backup > 10,000 psi
4. Up 7" x 9-7/8" casing annulus to 16" burst disk at 9,560 ft
 - Not likely - pressure with seawater backup > 10,000 psi
5. Up 7" x 9-7/8" casing annulus to failed 16" liner top and exit out 18" csg shoe
 - Took a kick, losses occurred while circulating out influx, ballooning issues
 - Highly likely due to previous losses reported
6. Up 7" x 9-7/8" casing annulus to failed 16" liner top and burst worn 18" csg
 - Possible - but no casing weak spots identified
7. Up 7" x 9-7/8" casing annulus to failed 16" liner top and failed 18" liner top exit out 22" csg shoe
 - Possible - liner top packer pressure rating unknown (assumed less than 16" of 6,500 psi)
8. Up 7" x 9-7/8" casing annulus to failed 16" liner top and burst worn 22" casing
 - Possible - but no casing weak spots identified
9. Up 7" x 9-7/8" casing annulus to failed 13-5/8" liner top and exit out 16" csg shoe
 - Very low - no evidence to support deeper exit
10. Up 7" x 9-7/8" casing annulus to failed 11-7/8" liner top and exit out 13-5/8" csg shoe
 - Very low - no evidence to support deeper exit
11. Up 7" x 9-7/8" casing annulus to failed 9-7/8" liner top and exit out 11-7/8" csg shoe
 - Very low - no evidence to support deeper exit
12. Up 7" x 9-7/8" casing annulus and taking losses downhole into previous lost circulation zone
 - Possible - unknown cement integrity; unknown FG at lost zone

William Burch

Wild Well Control, Inc.

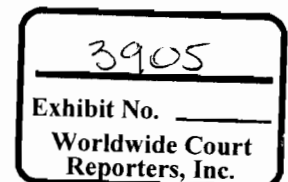
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