

Expro Excellence

VERSAFLO[™] Switch delivers 6+ hours of savings for deep water Mediterranean operator's complex drilling and liner operations

Well Construction | Drilling Technologies

Objectives and background

 A major IOC sought a solution to reduce time to trip out of hole with 12 1/4" drilling assembly as well as saving time to manage mud flow back while running 10" liner landing string in deep water drilling operations in the Mediterranean

Expro Excellence

 Expro offered its VERSAFLO[™] Switch patented flowback, fill-up and circulation tool that perfectly fits our client's request to pump out of hole quickly and efficiently with the drill string on elevators, while circulating with the tool's packer assembly. The VERSAFLO[™] Switch was also proposed to run the landing string to take flowback without the need to mechanically connect the top drive to the drill string. Additional efficiencies can be seen by being able to install the VERSAFLO[™] casing module and take flow back if required through the casing without the need to rig up separate tools for drill string and casing

Running landing string with VERSAFLO[™]

Running landing string without VERSAFLO™

ROP Inst 0 (m/hr) 100	Hookfoad Calic. (ktb) 0 800		ROP Inst Hookload Calc. (ldb) 0 (m/hr) 100 800
Block Position (m) -5 55	Hookload Avg (klb) 0 800	DATE & TIME	Biock Position (m) -5 55 0 0 800 DATE & TIME
8 PWD (ppg) 18	-50 ^{WOB Avg (Mb)} 50		8 PWD (ppg) 18 -50 W08 Avg (Mb) 50
NeDeath ECD Balleot	H.O.B	ESD Avg	tale Death ECD Bil Death H.O.B ESD Avg
4155.1 3032.7	186/ 00 0	22-May-24 02:00	2326.1 1250.4 173 00 0 02-Mar-24 22:00
4155.1 3032.7	0,0		2326.1 1251.2 215 0.0 23
4155.1 3044.1	649 00 1		2326.1 1260.8 509 0.0 -17
4155.1 3057.1	647 0.0 4		2326.1 1270.4 503 0.0 -11
4155.1 26 3070.4	645 0.0 5		2326.1 1280.0 498 0.0 6
4155.1 3074.0	189 00 0	22-May-24 02:10	- 497 3
4155.1 3074.0	190 174 00 50		2526.1 13 1209.3 495 0.0 -3 02-Mar-24 22:10
4155.1 3073.5	184		2326.1 1291.4 208 00 0 0
4155.1 3085.8	658		1326.1 1291.4 167 0.0 0
4155.1 3099.1	656 656 0.0 3		2326.1 1201.4 171 0.0 0
	651		2326.1 1291.4 172 0.0 0
4255.1 27 3112.0	191	22-May-24 02:20	2326.1 1291.4 172 0.0 02-Mar-24 22:20
4155.1 3114.8	191 00 0		2326.1 1291.4 173 00 2 0
4155.1 3114.8	665		2326.1 1292.3 527 0.0 29
4155.1 5122.9	665 0.0 1		2326.1 1301.9 517 0.0 -20
4155.1 3136.0	663 0.0 3		2326.1 1311.4 514 0.0 -16
4155.1 3149.2	<u>660 0,4 6</u>	22-May-24 02:30	2326.1 1321.0 500 0,0 -10 02-Mar-24 22:30
4155.1 28 3155.8	18// 00 0		2326.1 14 1330.5 504 -0.0 -6
4155.1 3155.8	161 00 0		2326.1 1332.2 180 0.0 - 0
4155.1 3166.8	672 0.0 2		2326.1 1332.2 165 0.0 0
4155.1 3179.8	668 0.0 7		2326.1 1332.2 172 0.0 0
4955.1 3193.0	664 0.0 7	22-May-24 02:40	2326.1 1332.2 172 0 0 0 02-Mar-24 22:40
4155.1 29 3197.1	1861 010 0		
4155.1 3197.1	174		
	184		2326.1 1332.2 174 0.0 > 0
	125 U		2326.1 1633.9 536 0.0 33
4155.1 3196.9	690 0.0 10 687 -		531
4155.1 3203.6	675 2.0 -5 682 3	22-May-24 02:50	524
4155.1 3216.3	674 0.0 -2 673		519
4155.1 30 3229.6	673 0 <mark>0 -0</mark>		2326.1 1361.5 518 0.0 15
4155 1 3237.9	194/ 0.0 0 178		226.1 1367.6 517 0.0 14
4155.1 <u>32</u> 37.9	177 0.0 0		1312.9 181 2
4155.1 3207.0	600 0 0 4P0	22-May-24 03:00	2326.1 1372.9 164 0 0 0 02-Mar-24 23:00



Value to the client

- The drilling assembly was successfully circulated out of hole with the aid of the VERSAFLO™ Switch tool, saving our client a minimum of 50% of each connection times. Likewise, the 10" liner landing string was successfully run with VERSAFLO™ Switch to take mud flow back
- Cumulative rig-time saved is 6-7 hours equating to an estimated \$240,000 USD of total rig-time costs
- The VERSAFLO[™] Switch significantly reduced the amount of mud spilling on rig floor providing further fluids cost savings
- HSE exposure was improved by reducing personnel entry into the red-zone during operations; the VERSAFLO[™] is operated from a wireless console inside the drill-shack
- Reduced wear and tear, improved life of consumable rig equipment (Saver sub and IBOP valve) saving additional costs and keeping personnel out of harm's way

With VERSAFLO™ Switch connection times are reduced, but it is not just that, it is how clean the rig floor is kept utilizing the tool and how it helps reduce the amount of time personnel are in the red zone. Very happy with the tool and the personnel and we will see you again on the next well.



