

## DIS Gatekeeper 763 Cement Retaining Collar Installation Case History

5/30/2017	13:30		
5/31/2017		10.50	Rigged up casing equipment for running 7.625" casing. Run casing in hole to 205'. Had problems getting float equipment to convert.
5/31/2017	0:00 1:10	1.17 3.16	Float equipment converted, by pumping 20 bpm at 360 psi. Run remainder of 7.625" casing from 205' to 2,138'
	4:20	1.67	Change out elevators, pick up inner string assembly (Assy# 1) and trip in hole. Rig up 4.5" bowls and slips. Continue tripping in hole with inner string
			assembly.
	6:00 6:30	0.50 1.00	Held JSA with crews on running inner string Run in hole with inner string from 307' to 870'
			Pick up bumper sub assembly and make up same, slacked off on assembly, could not install false rotary, due to OD of cross over sub on top of assembly. Back out bumper sub assembly and place in fox hole slips. Pick up 15' pup joint and make up to assembly. Run in hole with
	7:30	1.00	assembly and set on slips. Back out 15' pup joint and lay down same.
	10:00	1.50	Run in hole with inner string from 870' to 1,959'  Pick up kelly joint and make up 15' pup joint on bottom of assembly. Slack off and snap into Gatekeeper Cement Retaining Collar with 19,000 lbs. down force. Pick up and snap out of Gatekeeper Cement Retaining Collar with 15,000 lbs. over pick up weight. Verified space out. Filled liner with 13.1 ppg SBM @ 1 bpm. Snapped back into Gatekeeper Cement Retaining Collar and circulated down the inner string and back up the back side. Total time to run inner string 6.67 hours  Lay down kelly joint assembly. Pick up TIW liner hanger and make up to inner string. Rig down false rotary and make up hanger to 7.625"
	11:00	1.00	liner.
	12:00	0.75	Trip in hole with 1 stand of 5.875" landing string. Make up into top drive and pump down inner string @ 1bpm to confirm stinger snapped into Gatekeeper Cement Retaining Collar.
	12:45	11.25	Continue running in hole with 7.625" liner assembly.
6/1/2017	0:00	19.67	Continue running in hole with 7.625" liner assembly.
	19:40	4.33	Pumped cement job. Pumped 15 bbls base oil, 81 bbls spacer. Swap to cement unit pump 11 bbls of 13.8 ppg TXI blend cement. Drop bottom dart, continue pumping additional 179 bbls of 13.8 ppg TXI blend cement. Pump 11 bbls of freshwater, drop top dart, pump additional 15 bbls of freshwater. Swap to rig pumps and pump @ 3.5 ppm 179 bbls of 13.1 ppg SBM. Bottom dart lands and shears at 2,500psi.  Continue pumping 3.5 bpm; begin rotating 15 rpm w/ 22,000 torque. Pump a total of 289 bbls SBM. Drop 2.375" TIW Hanger Setting Ball. Pump total of 343 bbls SBM, monitor top dart land and shear @2,350 psi. Shut down pumps and wait 40 minutes for ball to seat.
6/2/2017	0:00	9.00	Working on getting Hanger Setting Ball to seat.
0/2/2017	9:00	1.00	Got landing string to release. Picked up and had free travel on string, continued picking up and noticed 10,000 lbs. snap out of Gatekeeper Cement
	3.00	2.00	Retaining Collar. Picked up another 5' to 17,195'  Lined up and pumped 82 bbls of nut plug. Staged pumps up to 850 gpm
	10:00	2.75	with 6,800psi, while rotating @ 70 rpms. Pumped a surface to surface volume, 13.5 ppg cement contaminated mud in returns at bottoms up.
			Performed line test to 4,000 psi. Lined up and tested casing to 3,350 psi for
	12:45 16:00	3.25	30 minutes on chart. Tested with 13.1 ppg SBM. <b>Good test.</b>
L	10.00	8.00	Trouble shoot top drive and pull out of hole.
6/3/2017	0:00	1.00	Continue pulling out of hole.
	1:00	5.00	Held JSA on negative test. Tripped in hole with Archer Packer. Pumped 104 bbls of seawater plus line displacement with cement unit (115 bbls total)
	6:00	2.00	Set packer at 3,400', pressured up on ball valve to 1,200 psi to open ball valve. Lined up and tested packer on back side to 1,500 psi for 5 minutes. Good test.
	8:00	2.50	Performed negative test. Bled down pressure from 1,135 psi to 636 psi, total of .5 bbls bled back. Pressure increased to 736 psi, held for 5 minutes, no pressure increase for 5 minutes. Bled down pressure from 736 psi to 240 psi, total of 2.0 bbls bled back. Pressure increased to 319 psi, held for 5 minutes, no pressure increase for 5 minutes. Bled down pressure from 319 psi to 0 psi, total of 6.75 bbls bled back to cement unit. Total barrels bled back to cement unit 9.25 bbls.  Monitored well on cement unit for 1 hour, no loss on trip tank and no returns or pressure seen on cement unit. Good test.
	3.00	2.30	Pressured up down drill string to 1,100 psi to unseat packer. U-tube test of 55
	10:30	2.00	bbls of fluid back to surface while holding back pressure on choke while filling back side with 13.2 ppg SBM. Lined up and reversed circulated sea water out of the hole.
	12:30	5.50	Tripped out of hole and laid down negative test assembly. Serviced top drive.
	18:00	6.00	Begin surface cleaning, rinsing pits, build soapy water and flush headers A and B in pit room.
6/4/2017	0:00	2.50	Continue surface cleaning, flush lines and headers with soapy water in pit room. Continue rinsing pits. <b>Total pit cleaning time 8.50 hours</b>