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# Expedition 314 Site C0005<sup>1</sup>

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Expedition 314 Scientists<sup>2</sup>

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## Operations

### Hole C0005A

Positioning of Integrated Ocean Drilling Program Hole C0005A (proposed Site NT2-01E) was confirmed at 0045 h on 5 November 2007. The seabed was tagged and the hole was spudded at 0100 h without any logging tools. Drilling was started and advanced to 2969.5 meters below sea level at 1700 h. Overpull was observed at 2961 m. After trying to free the drill string and working through the apparent pack off slowly, the pipe was reamed between 2923 and 2961 m, pulled out to 2812 m, and then run back in to 2925 m. An attempt was made to ream to bottom and circulate at 1930 h. However, the pipe became stuck at 2936 m at 2015 h and was freed after applying torque and work on the pipe. Unable to run in again to the previous total depth, and with hole conditions worsening, a decision was made to pull out and abandon the hole at 2300 h. The hole was displaced with kill mud at 2860 m at 2330 h, and we began pulling out at 0000 h on 6 November. The summary of operations in Hole C0005A is shown in Table [T1](#).

### Transit to Hole C0005B

The *Chikyu* moved to Hole C0005B (proposed Site NT2-01G) ~300 m southeast at 0240 h on 6 November 2007 and communication with beacons at the site was checked at 0500 h. Because of a failure with the remotely operated vehicle (ROV), running the measurement-while-drilling tool string into the hole began at 0000 h on 7 November. Repairs were completed on the ROV sonar at 1430 h. At 1115 h on 7 November the ship moved 2 km upcurrent while running the pilot hole assembly.

### Hole C0005B

Seafloor was tagged at 2553 m drillers depth below rig floor (DRF) at 1800 h on 7 November 2007. After drilling to 2590 m DRF (37 m drillers depth below seafloor), a leak caused the ROV's thruster controller to lose hydraulic pressure. Drilling was discontinued, and the ship moved to Site C0006 at 2015 h on 7 November (Table [T1](#)).

### Transit to Site C0006

After recovering the beacons from Site C0005, the *Chikyu* moved ~11.2 nmi to Site C0006 with an average speed of 5.6 kt at 0100 h on 8 November 2007. Five beacons were deployed from 0630

<sup>1</sup>Expedition 314 Scientists, 2009. Expedition 314 Site C0005. *In* Kinoshita, M., Tobin, H., Ashi, J., Kimura, G., Lallement, S., Sreaton, E.J., Curewitz, D., Masago, H., Moe, K.T., and the Expedition 314/315/316 Scientists, *Proc. IODP*, 314/315/316: Washington, DC (Integrated Ocean Drilling Program Management International, Inc.). doi:10.2204/iodp.proc.314315316.117.2009  
<sup>2</sup>[Expedition 314/315/316 Scientists' addresses](#)



to 2300 h. Calibration was done at 0145 h on 9 November.

**Publication:** 11 March 2009  
**MS 314315316-117**



Table T1. Operations summary, Site C0005. (See table notes.)

Operation	Start		Depth (m LSF)		Drilled (mbsf)	Comments
	Date (2007)	Local time (h)	Top	Bottom		
<b>Hole C0005A</b>						
Latitude: 33°13.5603'N						
Longitude: 136°43.1050'E						
Seafloor (drill pipe measurement from rig floor, m): 2475						
Distance between rig floor and sea level (m): 28.5						
Water depth (drill pipe measurement from sea level, m): 2446.5						
<b>Hole C0005B</b>						
Latitude: 33°13.4141'N						
Longitude: 136°43.2245'E						
Seafloor (drill pipe measurement from rig floor, m): 2553						
Distance between rig floor and sea level (m): 28.5						
Water depth (drill pipe measurement from sea level, m): 2524.5						
Hole C0005A pilot hole			0	524	524	8-1/2 inch pilot hole without LWD-MWD
ROV survey	4 Nov	0000				
Tag seafloor	5 Nov	0045				
Spud-in	5 Nov	0100				Jet-in to 50 m and rotary drill to TD
Backreaming and sweeping	5 Nov	1700				Short trip between 2999 and 2812 m DRF; POOH after failing to pass through and hole conditions worsened
Reach total depth	5 Nov	1630				Pump sweep and spot kill mud
Pull tools out of hole	5 Nov	2200				Move ship to next location (Hole C0005B) while hanging BHA in the water
Hole C0005B pilot hole			0	37	37	8-1/2 inch pilot hole without LWD-MWD
ROV survey	6 Nov	0240				ROV repaired from 0630 h 6 Nov to 1115 h 7 Nov
Tag seafloor	7 Nov	1700				
Spud-in	7 Nov	1900				
Reach total depth	7 Nov	1900				Stop drilling after ROV's thruster controller lost hydraulic pressure because of a leak
Pull tools out of hole	7 Nov	2015				

Notes: LSF = LWD depth below seafloor. LWD = logging while drilling, MWD = measurement while drilling. ROV = remotely operated vehicle. TD = total depth. DRF = drillers depth below rig floor. POOH = pull out of hole. BHA = bottom-hole assembly.