

Hole U14150¹

K.M. Gillis, J.E. Snow, A. Klaus, G. Guerin, N. Abe, N. Akizawa, G. Ceuleneer, M.J. Cheadle, Á. Adrião, K. Faak, T.J. Falloon, S.A. Friedman, M.M. Godard, Y. Harigane, A.J. Horst, T. Hoshide, B. Ildefonse, M.M. Jean, B.E. John, J.H. Koepke, S. Machi, J. Maeda, N.E. Marks, A.M. McCaig, R. Meyer, A. Morris, T. Nozaka, M. Python, A. Saha, and R.P. Wintsch²

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Operations

The only operations in Integrated Ocean Drilling Program Hole U14150 consisted of drilling a 14¾ inch hole to 17.0 mbsf. After reaching this depth, we prepared to establish reentry capability but had to abandon the hole because of poor hole conditions. The location of Hole U14150 is shown in Figure F8 in the “Expedition 345 summary” chapter (Gillis et al., 2014b), and operations in this hole are summarized in Table T1 and outlined below. All times are ship local time (UTC – 7 h).

Drilling operations

Following unsuccessful operations in Holes U1415K–U1415N on the shoulder, we decided to move back to the bench. The bottom-hole assembly (BHA) was changed to a drilling assembly with a 14.75 inch tri-cone bit and lowered to the seafloor. While the BHA was being deployed, a new free-fall funnel (FFF) cone was prepared for deployment. We deployed the camera system with the 3.5 kHz pinger attached and conducted a seafloor survey around the target drilling location (see Table T1 and Fig. F3 in the “Bench site survey” chapter [Gillis et al., 2014a]). We also observed the bit tag the seafloor at 4861.0 meters below rig floor). The survey was completed at 1536 h on 25 January 2013, and the camera system was back on board at 1815 h. Drilling in Hole U14150 started at 1900 h. The bit was washed down 1.5 meters below seafloor (mbsf) and then drilled in a massive, hard formation to 5 mbsf. At 5 mbsf, the bit penetrated 10 m (to 15 mbsf) in only 15 min. The formation firmed up from 15.0 to 17.0 mbsf by 0345 h on 26 January. We then successfully conducted a wiper trip and prepared to deploy the FFF cone. At this time, the hole began to collapse, and our attempts to drill and ream back to bottom failed; we could only get back to ~8 mbsf. We decided to abandon Hole U14150 at 0700 h on 26 January. The bit cleared the seafloor at 0710 h, ending Hole U14150.

References

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Table T1. Operations summary, Hole U1415O.

Hole U1415O (failed attempt to establish reentry capability):

Latitude: 2°15.1516'N
 Longitude: 101°32.5848'W
 Time on site (h): 29.50 (0145 h, 25 January–07150 h, 26 January 2013)
 Seafloor (drill pipe measurement below rig floor, m DRF): 4861.0
 Distance between rig floor and sea level (m): 11.3
 Water depth (drill pipe measurement from sea level, mbsl): 4849.7
 Total penetration (drilling depth below seafloor, m DSF): 17.0
 Total depth (drill pipe measurement from rig floor, m DRF): 4878.0
 Total length of cored section (m): 0
 Total core recovered (m): 0
 Core recovery (%): 0
 Drilled interval (m): 17.0
 Total number of cores: 0

Core	Depth (mbsf)		Interval cored (m)	Core recovered (m)	Curated length (m)	Recovery (%)	Date (2013)	Time UTC (h)
	Top of cored interval	Bottom of cored interval						
345-U1415O-11	0.0	17.0						
			Total:	—	—	—		

Local ship time was UTC – 7 h. DRF = drilling depth below rig floor, DSF = drilling depth below seafloor. Numeric core type = drilled interval. — = not calculated.