

OCEAN DRILLING PROGRAM OPERATIONS INFO

(Listed by legs in chronological order)

in. = inches

Leg	Hole	Leg Name	Date Leg Started	Reentry Structure	Casing	Known Problems (i.e., Junk in Hole)
					OD/ID (in.)	
100		NE GOM	01/85	R/E cone	16	Shakedown leg of ship. New core orientation system successfully deployed-system based on Eastman-Whipstock Magnetic Multishot tool. Tested R/E csg.
		26°22.7'N 79°08.8'W		left?	2 jts	
101		Bahamas				1st scientific voyage of JR-continuation of ongoing effort begun during DSDP & a test of the newly modified ship.
102A	418A	Bermuda Rise	03/85	R/E Cone	16	DSDP set R/E cone and casing in 1977. Packoff assy. in R/E Cone throat
103	638C	Galicia Margin	04/85	R/E Cone	16	
104	642E	Norwegian Sea	06/85	R/E Cone	16	1st dual casing reentry of ODP
					11-3/4	
105	645E	Baffin Bay & Labrador Sea	08/85	R/E cone	16	Hole left filled with weighted polymer mud
106	648B	Bare Rock	11/85	HRGB	16	Objective in PRT stated "testing and evaluating a number of new "bare rock" drilling techniques. Ops report said they tested the hard rock spud system. PRT Ops rept also said tested bare rock spud w/o guide structure or bit containment-only lowermost 30-40' rotates. First use of VIT?
	(also 109...)	Drilling in	Gimbaled R/E cone			
		Mid-Atlantic Rift Valley		hole left w/ cement drilled out to 3363 m		
107						
108		NW Africa	02/86			New style liner seal sub tested drawing SK 0084; logging side entry sub was introduced for 1st time in deep ocean riserless logging-test was successful; prototype FFF deployed & successfully reentered; new core recovery of 3841 m-exceeded old record by DSDP Leg 90; ship traveled 5607 nmi-greatest distance between ports since launch in 1978
109	648B	Bare Rx Drilling	04/86	R/E Cone	16	Added 10-3/4 in. casing & deepened Hole 648B cored on Leg 106; stuck pipe problems; Junk: Lost 1 X 9-7/8" bit cone; 1st use of hard rock guide base.
	(also 106)	in Mid-Atlantic			10-3/4	
		Ridge Rift Valley				
110	687C	Barbados	06/86	FFF w/		1st penetration of decollement zone; tested Barynes-Uyeda Heat Flow tool on XCB; Von Herzen temp tool deployed on alternating APC cores; core orientation multishot equip. deployed on each APC coring run; area cored on DSDP Leg 78 w/ RCB-many hole problems; packer test at H 671C, D
	671B	Ridge	6 ft of 13-3/8 csg			
111	504B	Costa Rica	08/86	R/E cone		Deepened (212.3 m) & logged Hole 504B (4 DSDP legs visited hole: 69, 70, 83, 92); R/E cone set by DSDP; ODP milled hole first; ran packer permeability tests; junk left in hole after fishing attempts
		Rift		DSDP		

Leg	Hole	Leg Name	Date Leg Started	Reentry Structure	Casing	Known Problems (i.e., Junk in Hole)
					OD/ID (in.)	
115		Mascarene Plateau	05/87	fff-713A		1st leg in Indian Ocean (1st of 9 planned); 1st mention of using WSTP that I found.
116		Bengal Fan	07/87	fff-718E		
117		Oman Margin	08/87			New recovery record-4367 m-3000 m recovered w/ XCB. New XCB bit seal (polypack) system was tested and used successfully
118	735B	SW Indian Ridge	10/87	HRGB		Record core depth and core recovery in hard rock-no numbers given in section
119		Kerguelen-Pryzd Bay	12/87	fff-740A		
				fff-742A but P&A		
120		Central Kerguelen Plateau	02/88	fff-748C		2nd FFF set at hole 749C; medical emergency, heart attack- Lamar Hayes died during the leg
				planned R/E but must not have used		
121		Broken Ridge & 90 E. Ridge	04/88	fff-752B		Medical evacuation
122	763B	Exmouth Plateau	06/88	R/E cone FFF-762C	16	deepest xcb penetration in ODP history - 940 mbsf- Hole 762C; lost logging tool in 762C, P&A; junk left in hole 763B, P&A
123	765D	Exmouth Plateau	08/88	R/E cone	16 11-3/4	Dropped two 3/8 in. bolts in hole.
124		Celebes & Sulu Seas	11/88	fff?-767B fff-768C fff-770C		2 medical evacuations; FFF dropped at hole 768C to do hydrofrac experiment; 2nd medivac did not allow for hydrofrac experiment. 1st Eng. PRT
124E		Philippine Sea	01/89			Engineering leg to test: prototype of DCS, modified navidrill core barrel (NCB) system, phase 1 of the PCS, redesigned XCB core barrel, coring techniques in deep-water chert sequences, and logging technology developed at LDEO. Results of tests were mixed.
125		Bonin/Mariana	02/89	FFF-779A		Used redesigned XCB core barrel tested on Leg 124E
126	793B	Bonin Arc-Trench	04/89	R/E cone	16 11-3/4	Tested prototype set of Hydrolex mechanical jars-was able to free pipe; but was lost in the second of three pipe severers; maiden voyage of FMS was successful; Hole 793B was deepest hole ever cored into basement under DSDP or ODP operations (1682 mbsf)
127	794C	Japan Sea	06/89	R/E cone	16 11-3/4	Left BHA in 794C w/ plans to fish on Leg 128 w/ special equipment; pipe failure lost BHA during trip to spud Hole 795B; tested sonic core monitor
	797C			R/E cone	16	

Leg	Hole	Leg Name	Date Leg Started	Reentry Structure	Casing	Known Problems (i.e., Junk in Hole)
					OD/ID (in.)	
128	799B	Japan Sea	08/89	R/E cone	16	Special sterile sampling techniques were used to quantify the role of bacteria in diagenesis by measuring their activity and biomass distribution with depth in sediments at Hole 798A; flaw in fish drill pipe and heave caused DP failure so additional fish in hole--did not recover either fish from Hole 794C so drilled Hole 794D, set R/E cone, installed a seismometer @ 715 mbsf; used new style of R/E cone for H 794D; 1st use of improved 9-7/8 tungsten carbide button bit-no damage shown after 21-1/2 hrs of rough drilling; real-time downhole measurements made w/ recently installed borehole seismometer (RV Tansei Maru) at 794D. Hole 799B had indications of hydrocarbons.
	794D			R/E cone	11-3/4 16 & 11-3/4	
129	801C	Old Pacific Crust	11/89	R/E cone	16	Hole left open 112 m below 2nd csg string; 1st Jurassic samples ever recovered from Pacific (oldest oceanic sedimentary and basement rocks [site 801-Middle Jurassic-1st in situ Jurassic basement]); deepest water (5969.0 m) ODP operated to date at Site 802; wireline cable broke and VIT fell to seafloor-not in R/E cone
					11-3/4	
130	807C	Ontong Java Plateau	01/90	R/E cone	16	The new stronger APC piston-rod assembly (1st two holes) and APC breakaway piston head (BPH; 2nd hole) were used without incident. The APC BPH parted in the top thread in Hole 803C with 100,000 lb of overpull. The BPH piston also came off in cores in Hole 804C. Testing of APC equipment in Hole 805B went well. First known reentry of a FFF using the through the drill pipe slimline sonar tool. The sonic core monitor was tested in Hole 806B-target jammed in the liner support sleeve. SCM electronics appear to work properly and showed blockage occurred during the first part of coring. 1st air drop in ODP history-2/20/90. New style reentry cone used in hole 807C. 1st R/E cone unjayed due to surge affects and sunk. 2nd R/E cone run. Junk left in Hole 807C.
					11-3/4	
				fff Hole 803D		
131	808E	Nankai	03/90	R/E cone	11-3/4	BHA severed in Hole 808A. Planned to set a R/E cone in 808A, but lost hole. Lost lithoporosity logging tool in 808B. Hole cemented. 11-3/4 csg set in Hole 808C w/ DIC-first successful deployment of DIC. Hole 808C was filled with mud. Lost 11-3/4 csg in Hole 808D, abandoned hole. Hole 808E was retry of 808D. It looks like they only ran 11-3/4 csg in 808E (no info on csg run w/ R/E cone). Performed VSP and TAM drillstring packer experiments (didn't seem to go well). Tried to deploy ONDO thermistor array but stopped inside BHA @ 4660 mbrf. Hole 808F-special tool measurements: LAST tool deployed, WSTP temp probe deployed, PCS unsuccessfully deployed, broken XCB cutting shoe ended drilling. Hole 808G ran WSTP (tools flooded with water); PCS recovered 0.49 m of pressurized core. LAST tool deployed. Dropped beacon in case Leg 132 had time to deploy ONDO tool.
	808D	Trough		R/E cone	16	
				fff Hole 808B		

Leg	Hole	Leg Name	Date Leg Started	Reentry Structure	Casing	Known Problems (i.e., Junk in Hole)
					OD/ID (in.)	
132	809F	Western & Central Pacific	06/90	HRGB		2nd Eng. PRT. Successfully emplaced ONDO tool in Hole 808E from Leg 131. Test Phase II of DCS, a new drill-in bottom hole assembly (DI-BHA) (later called DIC?), and a new hard rock base (HRB) seafloor structure for bare rock spudding. Feasibility testing of DCS successful. DCS drilled and cored in fractured crustal material as well as maintaining stable hole conditions in formations thought undrillable. HRGB installed at H 809C but cone did not have enough syntactic foam to keep it upright. Eventually they retrieved the cone and hard rock base to reuse at Hole 809D. Again HRGB retrieved and moved to H 809E, basalt was undercut and based tilted too much. Retrieved and moved to Hole 809F. First successful bare-rock drilling/coring of basalt at an active submarine volcanic rift.
132	810D	Western & Central Pacific	06/90	R/E cone		Csg hanger wedged in R/E cone. DI-BHA fell through the R/E cone into sediment below. DI-BHA was retrieved. So R/E cone sitting on surface but no csg set.
133		NE Australian Margin	08/90			1st operational use of new vibra-percussive corer (VPC) and 1st use of new conical side-entry sub (CSES) was successful. Severed pipe @ Hole 824A.
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136	843B		02/91	R/E cone	16	1st permanent seismic observatory for OSN-installed later. Successfully tested prototype of CORK or borehole seal (set & removed), which was to be
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139	857D 858G			R/E cone CORK		CORK set in both holes
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Leg	Hole	Leg Name	Date Leg Started	Reentry Structure	Casing	Known Problems (i.e., Junk in Hole)
					OD/ID (in.)	
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147	894C 894G	Hess Deep	11/92	HRB fff-Hole 895D	13-3/8 10-3/4	Recovered Scripps OBS lost 9 months earlier to retrieve battery and data disk. 1st field test of Drill-Quip running tools (20/16 in. and 13-3/8 and 10-3/4 in.). The HRB deployed at Hole 894C was 3-legged. HRB was mispositioned and toppled over. Ops Manger wrote thought HRB could be salvaged in future. Hole 894G had trouble getting csg strings in. Unstable hole led to high torque and drag problems. Hole angle increased with depth. Removed 10-3/4 in csg later to retrieve FMS and removed HRB and 13-3/8 in. csg.
148	896	Hole 504B	01/93	R/E cone	16 11-3/4	Returned to Hole 504B. Pipe was stuck, had to sever pipe. While waiting on fishing tools, cored 2nd site. Set R/E cone 6 jts 16 in. csg & 13 jts of 11-3/4 csg. Fish was retrieved from Hole 504B. Ran 3 milling runs and lost more jar and BHA in hole. Retrieved 2nd fish but left junk in hole. Milling ops should be able to clean hole.
149	899B	Iberia Abyssal Plain	03/93	R/E cone fff-897C	16 11-3/4	Lost 3.34 km of DP at Hole 898B. Hole conditions terminated, pipe stuck, terminated coring after pulling free w/ difficulty.
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Leg	Hole	Leg Name	Date Leg Started	Reentry Structure	Casing	Known Problems (i.e., Junk in Hole)
					OD/ID (in.)	
156	948D	N. Barbados	05/94	CORK		1st & 2nd triple-csg-string reentry installations; 1st use of underreamers to open hole diameter below csg; 1st use of downhole fluid motor to advance csg while drilling; 1st setting of a mechanical-set packer (bridge plug); 1st use of (stingerless) subsea release cement plug system; 1st use of a mechanical seal to close a csg/csg annulus; 1st use of screened csg to isolate an unstable frm interval; 1st use of hydrostatic "kill" methods to achieve instrument emplacement; 1st LWD logging (2 holes); 1st successful wireline logging through a decollement; 1st cement-bond log for evaluation of csg cementing effectiveness; 1st use of JR as deployment vehicle for explosive seismic sources. 2 CORKS installed; 948D installed thermistor string & pressure transducers, bad seal on CORK in hole. Barely had time to set the 2nd CORK. Did not have time to check it with VIT. Keir has it listed as functional from 1994-1997.
	949D	Ridge		CORK		
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158	957E	TAG	09/94	R/E cone (stripped)	13-3/8	HRB run at 957B but moved to 957C where it tipped over. Tipped HRB was retrieved at end of leg. Tried to set R/E cone/csg at 957D but CADA tool failed to release. Brought cone/csg back to ship. With the 2nd attempt, the R/E cone and csg were set. Tried several times to core got stuck several times and finally had to sever pipe in hole 957D. Lost 43.75 hr and \$49,000 of drilling tools and \$8,400 of Schlumberger tools. Lots of problems with sulfide grit mucking up moving parts. A R/E cone and csg were set at 957L but hole was abandoned because sulfide grit jammed running tool and hole conditions worsened.
	957L			R/E cone (plain)	16	
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Leg	Hole	Leg Name	Date Leg Started	Reentry Structure	Casing	Known Problems (i.e., Junk in Hole)
					OD/ID (in.)	
165	999B	Caribbean	12/95	R/E cone	16	The FFF sunk below the sediment/water interface. They tried reentering by going into visible crater-no luck.
				fff-H 998A	11-3/4	
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173	1067B	Return to Iberia	04/97			BHA separated at Hole 1067A and was lost in hole. No R/E cone & csg installed during leg. There were a lot of mechanical & equipment problems on this leg. Severed pipe at Site 1070.
				fff-1067A		
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176						Returned to 735B.
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179	1107A	Hammer Drilling & NERO	04/98	R/E cone	16	First sea test of HRRS. Nice write up about HRRS. ION hole-seismometer to be installed later. Scanned ops section quickly. Didn't see any other firsts.
					10-3/4	
180		Woodlark Basin	06/98			
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Leg	Hole	Leg Name	Date Leg Started	Reentry Structure	Casing	Known Problems (i.e., Junk in Hole)
					OD/ID (in.)	
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186	1150G	W. Pacific	06/99	R/E cone	20	Leg 186 was the 1st scientific venture to succeed in installing strain, tilt, and seismic sensors for long-term operation in seafloor boreholes. ION holes. Site 1150 sediments no basalt. Pipe parted in hole 1150C. Pipe was retrieved. When they attempted to set the 10-3/4 in. csg, the csg parted and they lost part of it down the hole. There were problems w/ the R/E cone not being machined properly on 1150D and probably w/ 1150C too-this probably caused the pipe and csg failures. Hole 1150C was abandoned. When they returned to plug the hole with cement, they saw lost joints lying on the seafloor. May have only lost 1 or 2 jts of csg in hole-weren't sure.
		Geophys. Obs.			16	
186	1150D	W. Pacific	06/99	R/E cone	20	Instrument package was emplaced (see p. 56 of PRT for details). Instrument string was cemented. First triple casing installation/first instrument emplacement.
		Geophys. Obs.			16	
					10-3/4	
186	1151B	W. Pacific	06/99	R/E cone	16	Longest open hole casing string set in ODP history. Instrument was emplaced on 9 Aug. and cemented w/ 80 bb. Of 15.8 lb/gal cement.
		Geophys. Obs.			10-3/4	
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191	1179E	WP ION Projec	07/00	R/E cone	16	Installation of the 3rd permanent long-term borehole geophysical observatory, i.e., 3rd ION hole; 2nd sea trials testing HRRS/hammer drill. Instrument installed on 23 Aug. and cemented in place. 1st ? Deployment of LDEO DAS tool?
		HRRS			10-3/4	

Leg	Hole	Leg Name	Date Leg Started	Reentry Structure	Casing	Known Problems (i.e., Junk in Hole)
					OD/ID (in.)	
192	1185B	Ontong Java	09/00	R/E cone fff-1183A fff-1184A	16	Drilling jars failed and pipe was lost in hole. Party decided to abandon hole rather than try to retrieve pipe.
193	1188F	Manus Basin	11/00	R/E cone Mod. HRRS R/E cone w/ 13-3/8 and 10-3/4 csg	16	Leg 193 1st operational use of HRRS (H 1189B); 1st operational use of ADCB (H 1188F); 1st free fall deployment of std sized R/E cone; most 8-1/4 in. drill collars ever used in a BHA; longest ever 8-1/4 in. BHA; SDS 260 fluid hammer used to assist in 13-3/8 csg installation in H 1188F; 2 FFF, 2 HRRS cones, and 1 full sized R/E cone deployed; severed pipe twice. Hole 1188F has a standard R/E cone, 16 in. csg and a modified HRRS R/E cone w/ 13-3/8 in. csg and 10-3/4 in. csg.
193	1189B	Manus Basin	11/00	HRRS R/E cone	13-3/8 10-3/4	HRRS R/E plus 13-3/8 and 10-3/4 csg.
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196						Longest LWD borehole drilling/logging operations to 1057.55 m at 808I; 1st vertical ACORK installation at Hole 1173B; 1st horizontal ACORK at 808I. New record of highest number of screens in a single borehole (6). Excellent comparison of AHC on and off in 2 holes
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200	1224D	H2O	12/02	R/E Cone fff-1224F	20 10-3/4?	ION hole. Instrument to be installed later. Set 10-3/4 into 20 in csg w/out 16 in?
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203						Set reentry cone, ION instrument hanger
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205						Set reentry cone, ION instrument hanger
206						Set reentry cone and casing

Leg	Hole	Leg Name	Date Leg Started	Reentry Structure	Casing	Known Problems (i.e., Junk in Hole)
					OD/ID (in.)	
207						
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209						
210						Future reentry cone and casing

OCEAN DRILLING PROGRAM ODP LEGACY HOLE CASING PROFILES

(Listed by legs in chronological order)

m = meters

in. = inches

mbsf = meters below sea floor

Leg (s)	Hole	Leg Name	Date Leg Started	Location Lat / Long	Water Depth (m)	Reentry Structure	Casing		Total Depth (mbsf)	Csg. / Hole Dia. at TD (in.)	Depth of Basement (mbsf)	Completion Eqpt. Installed	Known Problems (i.e., Junk in Hole)
							OD/ID (in.)	Depth (mbsf)					
102A	418A	Bermuda Rise	03/85		5519.0	R/E Cone	16	74.2					Packoff assy. in R/E Cone throat
103	638C	Galicia Margin	04/85			R/E Cone	16	44.6	44.8	14-3/4			
104	642E	Norwegian Sea	06/85		1289.0	R/E Cone	16	1342.2					
							11-3/4	1660.4	1229.4	9-7/8			
105													
106	504B	Baffin Bay & Labrador Sea	11/85										
(also 111...													
109	648B	Mid-Atlantic Ridge	04/86		3341.0	R/E Cone	16	9.0					
							10-3/4	27.8	50.5	9-7/8			Junk: Lost 1 X 9-7/8" bit cone
110	687C	Barbados Ridge	06/86										
111	504B	Costa Rica Rift	08/86										
(also 106													
123	765D	Exmouth Plateau	09/88		5724.2	R/E cone	16						
							11-3/4	947.9					
126	793B	Bonin Arc-Trench	04/89			R/E cone	16						
							11-3/4	586.5					
127	794C	Japan Sea	06/89			R/E cone	16	80.0					
							11-3/4	517.0					
	797C					R/E cone	16	80.0					
128	799B	Japan Sea	08/89			R/E cone	16						
							11-3/4						
	794D					R/E cone	16						

Leg (s)	Hole	Leg Name	Date Leg Started	Location Lat / Long	Water Depth (m)	Reentry Structure	Casing		Total Depth (mbsf)	Csg. / Hole Dia. at TD (in.)	Depth of Basement (mbsf)	Completion Eqpt. Installed	Known Problems (i.e., Junk in Hole)
							OD/ID (in.)	Depth (mbsf)					
							11-3/4						
129	801C	Old Pacific Crust	11/89			R/E cone	16	5.0					
							11-3/4	482.0					
130	807C	Ontong Java Plateau	01/90			R/E cone	16	58.1 ?					
							11-3/4	349.8?					
131	808E	Nankai Trough	03/90										
	808D												
132	809F	Western & Central Pacific	06/90										
	810D												
147	894C	Hess Deep	11/92			HRG-3 leg							
	894G					HRB- 3 leg	13-3/8						
						removed 10-3/4 csg to retrieve FMS	10-3/4	33.0					
148	896A	Hole 504B	01/93			R/E cone	16						
							11-3/4	191.5					

