

**Chikyū DAILY MORNING REPORT**

Mission No. : **CK13-04** Exp. No. : **Exp 348**

Report No. : **121**

Site Name : **C0002** Hole Name : **C0002P** Lat. **35° 18.057'N** Long. **136° 38.262'E** Report Date : **12/Jan/2014**  
 Depth @24:00 : **4928** mBRT **2960.5** mbsf (14.5') Progress : **48.0** m Seabed Depth : **1,967.5** mBRT **28.5** m  
 Depth @06:00 : **4928** mBRT **2960.5** mbsf (14.5') Drilling/Coring/Underreaming Hrs. : **12.25** hrs RTMUS : **13-38"** x **1,936.50** mbsf (3.904 mBRT)

Summary of Operation on **11-Jan** : **Opening 12-1/4" hole to 14-1/2". Ream up and down for hole cleaning. Resume opening to 14-1/2" hole.**  
 Present Operation @ 06:00 on **12-Jan** : **Continue POOH.**  
 Time Breakdown ( 00:00 - 24:00 ) on **11-Jan** : mBRT: meter below rotary table  
 mbsf: meter below sea floor

From	To	Hrs	Code	Detail of Operation
0:00	1:30	1:30	RR	Continue replace #3 cylinder of #1 mud pump. Circulate 450gpm x 12.8MPa, 80rpm x 13-16kN-m.
1:30	13:45	12:15	OH	Resume opening 12-1/4" hole to 14-1/2", 4880 - 4928BRT (2912.5 - 2960.5 mbsf, 48m). WOB: 0-201kN, 140rpm x 15-36kN-m, 900gpm x 35-37MPa. Boost 450gpm x 5.4MPa. ROP: ave 9.8m/hr, Max 40.8m/hr @4905mBRT, min 2.3m/hr @4885mBRT. T Gas: Tr, caving: Tr. Top of Underreamer cutter 4.42m from bottom of bit. (6:45 - 7:15) Packoff and stall HPS @4902mBRT while ream up. SPP was increased 900gpm x 34 to 37MPa (activate pump limiter). Shut off pump. SPP was decreased slowly. Once re-start pump with 450gpm x 14.5MPa, SPP was increased to 26.5MPa. Release HPS torque and work pipe (MAX Overpull: 600kN, Slack off: 300kN) with 150gpm x 20.4MPa. SPP was decreased to 8.1MPa gradually. Increase pump rate to 250gpm x 11.4MPa and continue work pipe. SPP was decreased to 6.6MPa. Increase pump rate to 450gpm x 12.8MPa and increase HPS speed, stall HPS 36kN-m. Pick up string and back to neutral weight, release HPS.
13:45	15:30	1:45	SP	Pack off @4928mBRT. HPS stall and SPP was increased 900gpm x 35 to 38MPa. Reduce pump rate to 300gpm x 22MPa and confirm return mud. Work pipe and release HPS torque. Reduce pump rate to 150gpm x 23.2MPa and work pipe (Max slack: 200kN, overpull: 450kN), SPP was decreased to 8.5MPa gradually. Increase pump rate to 450gpm x 11.8MPa, 600gpm x 18MPa and 900gpm x 35MPa. Continue work pipe (Max overpull: 900kN, slack: 300kN), several times. Once overpull 900kN with 450gpm x 12.3MPa, confirm moving BHA. Increase HPS speed 120rpm and confirm free pipe. Stuck pipe @4927.5mBRT again, SPP was increased to 900gpm x 35 to 37.5MPa. Reduce pump rate to 300gpm x 7.5MPa, release HPS torque and overpull 980kN (no jar fired), confirm moving BHA. Increase HPS speed to 130rpm and confirm free pipe.
15:30	20:45	5:15	C&C	Sweep 10 m3 of hi-vis mud. After displace 2000 cts, sweep 10m3 of hi-vis again @4928mBRT with 550gpm x 17.4MPa, 120rpm x 15-18kN-m. Increase pump rate to 900gpm x 33.7-35.0 MPa.
20:45	21:15	0:30	C&C	Spot 20m3 of hi-vis mud @4924mBRT with 900gpm x 34MPa, HPS 120rpm x 11-17kN-m.
21:15	22:15	1:00	RR	Trouble shooting of torque wrench on HPS. Couldn't break between saver sub and drill pipe (6-5/8"DP Z-140) due to slippage torque wrench die. Attempt to break connection few times, confirm break connection.
22:15	24:00	1:45	Trip	POOH to 4696mBRT. (22:15-23:15) Observe drag while POOH. 350kN @4926 - 4904mBRT (#3 triple stand). Overpulled 750kN @4900mBRT. Connect HPS and ream up with 300gpm x 9.5MPa, 140rpm x 18 kN-m (#2 triple stand). Stall HPS @4902mBRT. Slack 250kN and release HPS. Overpulled 700kN @4877mBRT. Connect HPS and ream up with 450gpm x 14.1MPa, 140rpm x 18 kN-m (#1 triple stand). (23:15-24:00) POOH from 4851 to 4696mBRT. No excess drag. Note: Offload 17ea full skips to Shincho-maru and back to Shingu. Load 15ea empty cutting skips from Shincho-maru. (0:00 - 24:00) DP Status "Advisory" due to unstable signal of No.3 Anemometer. Check No.3 Anemometer at derrick. No.3 Anemometer works well, but could not find out causes. Monitor conditions two or three days. Dive ROV. ROV inject glycol 40gal to BOP and 10gal LMRP. Recover to surface. Sea current: Chikyū 0.5-1.4 knot. SW 5miles 0.5-3.2 knot.

	Angle	Deg
LFJ	0	0
LMRP	130	0.5
BOP	170	0.5

Bulls eye reading @15:31

From	To	Hrs	Code	Detail of Operation
0:00	6:00	6:00	Trip	Continue POOH to 2785mBRT. No excess drag. Flow check @3892mBRT - OK. Note: (0:00 - 6:00) DP status "Advisory" due to monitor anemometer condition. Sea current: Chikyū 1.2knot, SW 5miles 2.3knot, S 17miles 2.1knot @6:00.

Bit No.	Size (in)	MFR	Type	IADC Code	S.No.	Nozzles	Depth (m)	Meter- age	Hrs.	WOB (kN)	rpm	Total Rev. (kern)	Inner	Outer	Dull	Loc.	B	G	O.D.	RP
RR8a	14.5"	NOV	Underreamer	M223	1225-0121	8 x 1	3826.00	4,928.00	1,002.0	89.46	0	152	60	150	1,244.0					

BHA Record: 14-1/2" Underreamer bit sub x 14.5" Underreamer x float sub (with pretype float) x 8-1/2" DC (1) x 12-3/16" Stab x 8-1/2" DC (11) x Drilling Jar x 8-1/2" DC (2) x XO x 5.68" HWDP (12) x XO x 5" DP S-140 (16'fids) x 5-1/2" DP S-140 (21fids) x XO x 5-1/2" DP S-150 (25fids) x XO x 6-5/8" DP Z-140

Mud Type	Time	Depth (mBRT)	MW	VIS	PV	YV	Gel St. (10", 10')	WL	Cake	pH	PI	Cl-	Sand	Oil	Solid	MBC	Temp (In/Out)	K+	n	K	LOG		
KNPP	3:30	4,888	1.32	144	52	71	14	20	2.4	0.5	10.8	0.1	117,200	0.2	0	15.0	2.00	15	12	37,700	0.51	5.16	2.8
KNPP	18:30	4,830	1.32	160	55	71	15	21	2.5	0.5	10.8	0.1	117,200	0.2	0	15.0	2.25	14	11	33,000	0.51	2.83	3.0
Hi-vis	Hi-vis	1:32	290	68	96	21	32													0.50	7.24		

No.	Liner Size	SPM	GPM	Press. (MPa)	Ann. Vel. (m/min)	DC	DP
1	6"	180	900	34.6	46		37
2	6"						
3	6"						

Personnel @24:00	Mud Materials on Board @24:00hrs (unit: kg)
CDX 10	Barite (Bulk) 117,000
MJQ Crew 6	Kunigel-VG (Bulk) 10,800
MJQ (SC Other) 1	NaCl 10,000
MJQ (Sub sea & Hyd) 2	NIW 3,000
NIW 17	KCl 3,000
Scientist 0	Tel-Polymer DX / L / H 07200
	300/1000 3580/1600/1300
	XCD-Polymer 0
	Soda Ash 1,275
	KOH 1,600
	150
	Clean Lube 1,600
	5,600
	Tel Clean 600
	Bi-Carbonate 1,000
	Limx 1,240
	Debaomer 30C 192
	Telinite GXL 162
	Tel DD 3,200
	NaOH 800
	Lignite NC 2,000
	Tel Step G / P 500 / 1000
	Tel Mica C / M / F 500 / 1,000 / 1,000
	Tel Plug C / M / F 500 / 1,200 / 980
	Tan Cal M / F / FF 4230 / 4500 / 0
	EZ Spot 550
	Speeder P / X 1700 / 1700
	Banacor-100 (gal) 0
	Astlex S 2,400
	Treat HS 2,160
	Xarvis 700
	25
	1,100
	Telinite OS-5 0
	Telinite HEC 0
	total 155

Shale Shaker	Cartridge hrs
No.1 #10, #230 x 2 No.4 #10, #200 x 2 No.1 #10, #200 x 2	8.17
No.2 #10, #200 x 2 No.5 #10, #200 x 2 No.2 #10, #200 x 2	off
No.3 #10, #200 x 2 No.6 #10, #200 x 2 No.3 #10, #200 x 2	off

Item	Unit	Received	Used	Stock
Fresh Water	m3	90.8	95.0	281.0
Potable Water	m3	0.0	10.5	230.9
Drill Water	m3	0.0	33.5	790.5
Fuel	m3	0.0	54.6	2,414.4
Lube, Oil	Ltrs	0.0	500.0	43,700.0
Hel Fuel	Ltrs	0.0	0.0	0.0
Cement "GWC"	ton	0.0	0.0	0.0
Cement "G"	ton	0.0	0.0	0.0

Boat Name	Status	Departed	Arrived
Kaiko	Chikyū	-	-
Shincho-maru	Chikyū	3:20	19:35
Hakuryū-maru	Current survey, S 10miles	-	-

Time	Weather	Temp. (degC)	Barometer (hPa)	Wind (Dir, deg)	Wind (Gust, m/s)	Height (m)	Wave (Dir, deg)	Wave (Period, s)	Current (Speed, knt)	Dir, (deg)	Visibility (km)
24:00	bc	7.5	1027.3	2.1	0.0	2.7	0.9	270	5.5	0.8	22.0

Today's Schedule: Continue POOH. Check Underreamer and Bit condition. RIH 14-1/2" Underreamer BHA. Drilling line cut & slip.

Reported by : D. Ikenomoto / T. Yokoyama / S. Kataok  
 Approved by : T. Saruhashi