Chikyu DAILY MORNING REPORT

Mission No. : CK13-04 **Exp. No. :** Exp 348 **Report No. :** 102

Site Name : C0002 **Hole Name :** C0002P **Lat.** 33° 18.0507'N **Long.** 136° 38.2029'E **Report Date :** 24/Dec/2013

Depth : @24:00 **4167.5** mBRT **2200.0** mbsf Progress : **4167.00** m Seabed Depth : **1,967.50** mBRT RT-MSL : **28.5** m

Depth : @06:00 **4168.5** mBRT **2201.0** mbsf Drilling/Coring/Jetting Hrs. : **8.50** hrs LAST CASING : **13-3/8"** x **1,936.50** mbsf(3,904.0 mBRT)

Summary of Operation on **23-Dec** : Cut and recover # 2 and 3 RCB core. Cut #4 RCB core.

Present Operation @ 06:00 on **24-Dec** : Continue cut #4 RCB core. Recover inner barrel.

Time Breakdown (00:00 - 24:00 on **23-Dec**)

mBRT: meter below rotary table

mbsf: meter below sea floor

From	To	Hrs	Code	Detail of Operation
0:00	2:45	2:45	Other(N)	Troubleshoot coreline winch.
				Couldn't pass sinker bar to HPS. Coreline was slack and found irregular winding on coreline drum. Pay out and re-wind coreline.
				Meanwhile, close coreline BOP and start circulation. 200gpm x 4.4MPa.
2:45	3:30	0:45	Core (other)	Run sinker bar and recover inner barrel with FWD winch.
				Check line tension 80kN @3874.3mBRT. Confirm landing of sinker bar and pull, coreline tension to 180kN (tension limit).
3:30	4:00	0:30	Core (N)	Attempt recover inner barrel.
				Close coreline BOP and circulate 600gpm x 25.6MPa. Pull sinker bar, coreline tension to 180kN.
				Close coreline BOP and circulate 700gpm x 32.4MPa with tension 175kN. Tension was decreased to 133kN after open coreline BOP.
4:00	5:30	1:30	Core(other)	Continue recover inner barrel. Check coreline tension, 120kN @3874.0mBRT.
5:30	6:45	1:15	C&C	Circulation and hole cleaning.
				Check SPP with 150gpm x 3.2MPa, 300gpm x 5.2MPa. Increase pump rate to 900gpm, SPP was decreased to 24.7 to 19.5MPa. Sweep out 5m3 Hi-vis.
				Check SPP with 150gpm x 2.8MPa, 300gpm x 4.1MPa.
6:45	7:00	0:15	Core(other)	Drop inner barrel and chase 300gpm x 3.6MPa. Landing inner barrel after 20min, SPP was increased to 6.0MPa. Check SPP, 400-500-600-700-800gpm x 8.3-11.4-17.3-23.4-28.4MPa.
7:00	9:45	2:45	Core	Cut #2 RCB core 4140 - 4149.5mBRT (2172.5-2182.0mbsf).
				Set auto driller WOB to 70-160kN, 400-600gpm x 9.8-17.6MPa, 80-140rpm x 10.3-14kN-m. ROP: ave 3.88m/h, Max 10m/hr, min 2.1m/hr.
9:45	11:45	2:00	Core(other)	Run sinker bar and recover inner barrel.
11:45	13:00	1:15	C&C	Sweep out 10m3 Hi-vis, 900gpm x 19.0MPa.
				Meanwhile, prepare for next inner barrel. (set core catcher , upper slip type and lower comb w/soft spring)
13:00	13:30	0:30	Core(other)	Drop inner barrel. Make connection and chase 300gpm x 3.6MPa. Landing inner barrel after 27min, SPP was increased to 6.0MPa. Check SPP, 400-500-600-700-800gpm x 8.4-13.3-18.1-23.1-28.5MPa.
13:30	16:15	2:45	Core	Cut #3 RCB core 4149.5- 4159mBRT (2182.0-2191.5mbsf).
				Set auto driller WOB to 70-160kN, 500gpm x 13.0-14.9MPa, 80-120rpm x 8-15kN-m. ROP: ave 4..58m/hr, Max 7.5m/hr, min 3.13m/hr.
16:15	16:45	0:30	Core(other)	Pick up w/500gpm and 60rpm to 4149mBRT. Rack back 1std for BHA in 12-1/4" hole.
16:45	19:30	2:45	Core(other)	Run sinker bar and recover # 3 core.
				Observed brake of slip type core catcher and jammed in core catcher sleeve w/plugged core.
19:30	20:30	1:00	C&C	Connect HPS and sweep 5 m3 of hi-vis mud, 900gpm x 19.3MPa.
20:30	21:00	0:30	Core(other)	Drop inner barrel. Make connection 1std and chase 300gpm x 3.6MPa. Landing inner barrel after 27min, SPP was increased to 5.9MPa. Check SPP, 400-500-600-700-800gpm x 8.4-11.2-17.9-23.0-29.3MPa.
21:00	24:00	3:00	Core	Cut #4 RCB core 4159-4168.5mBRT (2191.5-2201mbsf).
				Set auto driller WOB to 70-139kN, 400-500gpm x 9.8-13.8MPa, 60-120rpm x 8-15kN-m. ROP: ave 3.78m/h, Max 5.25m/hr, min 19.5m/hr.

Angle	Deg
LFJ	0.0	0
LMRP	130.0	0.5
BOP	170.0	0.5

Bulls eye reading @9:00

No.	Core System	Core on Deck	Depth (mBRT) from	Depth (mBRT) to	Advance m	Recovery m	Recovery %	Core Catcher upper	Core Catcher lower	Lithology @Shoe
1	RCB	5:13	4,130.5	4,140.0	9.5	0.4	4.2%	8AS	8AS	Med.gray firm siltstone to v.f. sandstone (shoe btm) and stiff darkgray claystone w/ slight slickenside.
2	RCB	11:38	4,140.0	4,149.5	9.5	6.05	63.7%	8MS	8AS	Med.gray firm siltstone to v.f. sandstone (shoe btm) and stiff darkgray claystone w/ slight slickenside
3	RCB	18:42	4,149.5	4,159.0	9.5	2.87	30.2%	8MS	SL	Med.gray v.f. sandstone w/ lamination.

Note:

Offload 4ea full skips to Shinchou-maru.

Recover ROV. Fill glycol and dive. ROV inject glycol 75gal to BOP and 60gal to LMRP.

Sea current: Chikyu 0.8-1.8knot. SW 5miles 2.0knot.

Time Breakdown (00:00 - 06:00 on **24-Dec**) * The data on 00:00 - 06:00 is unofficial.

From	To	Hrs	Code	Detail of Operation
0:00	0:15	0:15	Core	Continue cut #4 RCB core.
0:15	1:45	1:30	Core(N)	Run sinker bar. Sinker bar couldn't pass coreline BOP due to high friction between coreline and wiper. Wind up and pay out sometimes.
1:45	4:15	2:30	Core(other)	Resume recover inner barrel.
				Couldn't recover inner barrel due to tension limit, lower tension to neutral weight. Close coreline BOP and pump, 600gpm x 21.2MPa. Open coreline BOP and wind up - NG.
				Close coreline BOP and pump 750gpm x 29.0MPa with tension (170kN). Open coreline BOP and wind up quickly, release.
4:15	5:30	1:15	C&C	Sweep out 10m3 Hi-vis, 900gpm x 19.2MPa.
5:30	6:00	0:30	Core(other)	Drop inner barrel and chase 300gpm x 3.5MPa. Landing inner barrel after 21min, SPP was increased to 5.9MPa. Check SPP, 400-500-600-700-800gpm x 8.1-11.1-17.-23.3-28.2MPa.

No.	Core System	Core on Deck	Depth (mBRT) from	Depth (mBRT) to	Advance m	Recovery m	Recovery %	Core Catcher upper	Core Catcher lower	Lithology @Shoe
4	RCB	3:53	4,159.0	4,168.5	9.5	8.17	86.0%	8MS	8AS	Med.gray firm v.f. sandstone to siltstone and stiff darkgray claystone w/ slickenside
5	RCB	-	4,168.5					8MS	-	

Sea current: Chikyu 1.4knot. SW 5miles 1.8knot. S 17.8miles 3.1knot.

Bit Record

Bit No.	Size (in)	MFR	Type	IADC Code	S/No.	Nozzles	Depth (mart) From	Depth (mart) To	Meter-age	Hrs.	WOB (kN) Min.	WOB (kN) Max.	rpm Min.	rpm Max.	Total Rev. (krev)	Dull Condition Inner	Outer	Dull	Loc.	B	G	O.D.	RP
7	10.625	BHC	BHC405	M333	71283665	5 x 18	4130.50	4,167.50	37.0	10.59	88	183	60	141	120.0								

BHA Record

#7	RCB	Bit x Bit sub w/stab x RCB core barrel x Top Sub x Head Sub x 10-5/8"Stab x 8-1/2"coring DC (12) x Coring Jar x 8-1/2"coring DC(3) x XO x 5.68"HWDP(12) x XO x 5"DP S-140 44stds
		x 5-1/2"DP S-140 21stds x 5-1/2"DP S-150 25stds x XO x 6-5/8"DP Z-140

Hook Wt. (kN) @ 4,150.0 mBRT

Hook Load	2,750
BHA	300
Below HWDP	250
Below Jar	200
Hook + HPS	730
Hook block	307

Jar Rotating time S/N: 156578-85002

Today	7.56	Total	10.59	hrs

Cutting skip @24:00

Empty	Full	Total
53	3	56

Mud Properties

Mud Type	Time	Depth (mBRT)	MW	VIS	PV	YY	Gel St. (10", 10')	WL	Cake	pH	Pf	Cl-	Sand	Oil	Solid	MBC	Temp In	Temp Out	K+	n	K	LGS
KNPP	3:00	4,140	1.28	108	46	53	8 12	2.7	0.5	11.6	0.2	113,600	0.2	0	12.5	1.25	12		31,200	0.55	3.20	1.5
KNPP	14:00	4,150	1.28	110	45	46	7 11	2.6	0.5	11.5	0.2	110,000	0.2	0	12.5	1.00	12		31,800	0.58	1.15	1.6
KNPP	16:00	Hi-vis	1.28	300	59	94	16 34			11.3							20			0.47	8.14	

Mud Pumps : 14-P-220 @ 4167.5 mBRT 5.00 gallon/stroke @97%

No.	Liner Size	SPM	GPM	Press. (MPa)	Ann. Vel. (m/min) DC	Ann. Vel. (m/min) DP
1	6"	100	500	14.0	12	11
2	6"					
3	6"					

Personnel @24:00

CDEX	10
MOJ Crew	95
MOJ (SC, Other)	1
MOJ (Sub sea & Hyd)	2
MWJ	16
Scientist	24
Telnite	2
Oceaneering	6
Schlumberger-CMT	1
SLB WL	0
Geoservice	6
Vetco	1
Halliburton-LWD	3
Halliburton-DD	1
Weatherford (CSG)	0
Mi-Swaco	4
Whipstock	1
Total	173

Mud Materials on Board @24:00hrs (unit: kg)

Item	Received	Used	Stock
Barite (Bulk)			147,000
Kunigel-VO (Bulk)			10,800
NaCl			35,000
KCl		2,000	11,000
Tel-Polymer DX / L / H			6340/2720/1480
XCD-Polymer		25	700
Soda Ash		125	800
KOH			2,825
Clean Lube		400	4,400
Tel Clean			3,200
Bi-Carbonate			1,000
Lime			1,240
Defoamer 30C			192
Telnite GXL			36
Tel DD			3,200
NaOH			800
Lignite NC			2,000
Tel Stop 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
Baracor-100 (gal)			0
Astex S			5,800
Treat HS			0
Rester			0
Telnite OS-5			0
Telnite HEC			0

Mud Volume (m3)

KNPP mud (1.28)	245
KNPP mud (1.11)	349
KNPP mud (1.21)	53
LCM 20% (1.13)	24
Hi-vis (1.28)	33
KNPP (1.54)	13
total	798

ROV

Status	On deck
Last Dive	12/23/13
Injection Skid	0 /135 gal

Geologic Information

From	To	Lithology of cuttings
4130.0	4158.0	Claystone 65-85
		Siltstone 10-20
		Sandstone 5-15

Shale Shaker Centrifuge: hrs

No.1	#10, #200 x 2	No.4	#10, #180 x 2	No.1	7.0
No.2	#10, #180 x 2	No.5	#10, #200 x 2	No.2	off
No.3	#10, #200 x 2	No.6	#10, #180 x 2	No.3	off

Heli Information

Flt. No.	Time Arrived	Time Departed	Passenger Are.	Passenger Dept.
1				
2				
3				
4				

Materials Stock on Board @24:00

Item	Unit	Received	Used	Stock
Fresh Water	m3	95.2	100.0	(4.8)
Potable Water	m3	0.0	5.2	(5.2)
Drill Water	m3	0.0	21.0	(21.0)
Fuel	m3	0.0	49.6	(49.6)
Lube, Oil	Ltrs	0.0	500.0	(500.0)
Heli 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

Safety (HSE) and other information

Incident	Last Incident	No. LTA
	13/Feb/2013	
LTA		
HUNS cards	28	

Remarks

Revised Jar rotating time: 21 -> 3.05hr.

Boat Information @24:00

Boat Name	Status	Time @Chikyu Departed	Time @Chikyu Arrived
Kaiko	Chikyu	-	15:20
Shinchou-maru	Shingu	12:00	-
Hakuryu-maru	Current survey @S 10miles	-	-

Marine Information @24:00

Heave (m)	0.3
Pitch (deg)	0.3
Roll (deg)	0.2
Vessel Heading (deg)	325
Riser Tension (kN)	9400
V.D. Load (Moon)	12425.8
Max Draught (m)	9.0
Thruster (kW)	1000

Weather Information

Time	Weather	Temp. (degC) Air	Temp. (degC) SW	Barometer (hPa)	Wind Speed (m/s)	Wind Dir. (deg)	Wind Gust (m/s)	Wave Height (m)	Wave Dir. (deg)	Wave Period (s)	Current Speed(knt)	Current Dir. (deg)	Visibility (km)
24:00	bc	10.0	17.3	1022.4	4.7	309.0	5.6	0.9	30	7.0	1.5	102	22.0

Today's Schedule: Cut RCB core, POOH w/RCB coring BHA

Reported by : D. Ikenomoto / S. Kataoka

Approved by : Y. Uemura