***Chikyu* DAILY MORNING REPORT** **Mission No. :** **CK16-02** **Exp. No. 365** **Report No. :** 29

Site Name : C0010 **Hole Name :** C0010E **Lat.** 33°12.5500' N **Long.** 136°41.2223' E **Report Date :** 24/Apr/2016

Depth 10E : @24:00 2,938.5 mBRT 372.0 mbsf Progress : 162.5 m Seabed Depth : 2,566.50 mBRT RT-MSL : 28.5 m

Depth 10E : @06:00 2,583.0 mBRT 16.5 mbsf Drilling/Coring/Jetting Hrs. : 17.00 hrs LAST CASING : x mbsf

Summary of Operation on 23-Apr : POOH. Spud-in C0010E hole. Drill down to 2926.5mBRT. Cut C0010E-1R&2R cores.

Present Operation to 06:00 on 24-Apr : POOH @2736.5mBRT.

Time Breakdown (00:00 - 24:00 on 23-Apr)

mBRT: meter below rotary table
mbsf: meter below sea floor

From	To	Hrs	Code	Detail of Operation
0:00	1:30	1:30	TRIP	POOH 10-5/8"RCB BHA to 2550mBRT (above 5m seabed).
				Up reaming w/ 50rpm x 8 - 10kN-m @2949 - 2900mBRT
				Occasional overpull 150 - 200kN @2898-2780m, Pass through with pumping out (20spm x 0.9 - 3.2MPa).
				No excessive overpull below 2780mBRT. (Accretionary Prism Boundary).
				* Observe many cuttings recover from liner.
1:30	2:45	1:15	OTHER	Load Sinker bar and recover core barrel, unload Sinker bar. * Meanwhile move to C0010E hole.
2:45	3:30	0:45	OTHER	Circulation and Drop Center Bit.
				(02:45 - 03:00) Circulation for checking P.P w/o Center Bit. * 40-0.50, 50-0.52, 60-0.70, 80-1.30, 100-2.0, 120-2.9 (spm-MPa).
				(03:00 - 03:30) Drop Center bit and Chase w/50spm x 0.5MPa -> 1.30MPa.
				Check P.P. 30-0.52, 40-0.69, 50-1.20, 60-1.60, 80-3.0, 100-4.5, 120-6.3 (spm-MPa)
3:30	4:30	1:00	OTHER	Seabed survey.
				Tag seabed @2566.5mBRT.
4:30	13:45	9:15	DRLG	Wash and Drill down to 2778mBRT (360mbsf).
				WOB: 22kN, TQ: 60rpm x 2.0-6.0kN-m, MP: 80spm x 3.2-3.9MPa. Ave.ROP: 33.3m/hr.
				Sweep out 5kL of SWG every stand @2566.5 - 2766.5mbRT and 10kL of SWG every joints @2766.5 - 2778.0mBRT.
				Increase pump pressure to 3.9MPa due to nozzle plugged.
				Ream up and down 1time every DP stand down.
				(04:30 - 07:30) Jetting down w/30spm x 0.6MPa @2566.5 - 2600.0mBRT (0.0 - 33.5mbsf).
				(07:30 - 13:45) Drill down from 2600 to 2778mBRT (33.5 - 211.5mbsf)
13:45	14:45	1:00	W&R	Ream up/down for opening hole around Unconformity zone from 2778 to 2740mBRT (211.5 - 173.5mbsf)
				Observe no excessive drag. TRQ: 120rpm x 3.2-5.0kN-m. MP: 80spm x 3.2-3.7MPa.
				(14:15) Sweep out 10m3 of SWG while reaming up/down. TRQ: 120rpm x 3.7-4.9kN-m. 60rpm x 2.1-3.0kN-m. MP: 80spm x 3.2-4.0MPa.
				(14:45) Decrease pump stroke to 0spm and observe no trapped pressure.
14:45	21:00	6:15	DRLG	Drill down from 2778 to 2926.5mBRT.
				WOB: 45kN, TQ: 60rpm x 1.5-6.2kN-m, MP: 80spm x 3.9-4.1MPa. Ave.ROP: 33.8m/hr.
				Sweep out 10kL of SWG every joints. Ream up and down 1time every DP stand down.
				From 2896mBRT (329.5mbsf), Pump 5kL of SWG and 5kL of SW alternately.
				From 2922mBRT (355.5mbsf), Pump 5kL of Guar Gum and 5kL of SW alternately.
21:00	22:00	1:00	CORE	Load sinker bar and retrieve center bit.
				All two bit nozzles are plugged.
22:00	22:15	0:15	CORE	Drop inner barrel.
				Chase pumping with 50spm x 1.0MPa ->1.9MPa (after landing). Check pressure: 80spm x 3.7MPa.
22:15	22:30	0:15	CORE	Cut C0010E-1R core from 2926.5 to 2932.5mBRT (360-366mbsf). * While coring operation, keep pumping 5kL of Guar Gum and 5kL of SW alternately.
				WOB: 3kN. TRQ: 60xrpm x 1.8-5.0kN-m. MP: 50spm x 2.2MPa. Ave.ROP:40m/hr.
22:30	23:15	0:45	CORE	Load sinker bar and retrieve inner barrel.
23:15	23:45	0:30	CORE	Drop inner barrel.
				Retrieve sinker bar. Chase pumping with 50spm x 0.6MPa -> 1.8MPa (after landing). Check pressure: 80spm x 3.7MPa.
23:45	24:00	0:15	CORE	Cut C0010E-2R core from 2932.5 to 2938.5mBRT (366-372mbsf). * While coring operation, keep pumping 5kL of Guar Gum and 5kL of SW alternately.
				From 2932.5 to 2934.5mBRT (366-368mbsf); WOB: 25-60kN. TRQ: 30xrpm x 4.1-6.1kN-m. MP: 30spm x 1.4MPa. Ave.ROP: 40m/hr.
				From 2934.5 to 2938.5mBRT (368-342mbsf); WOB: 33kN. TRQ: 50rpm x 2.5-5.5kN-m. MP: 50spm x 3.9MPa. Ave. ROP: 34.3m/hr.

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

From	To	Hrs	Code	Detail of Operation
0:00	0:45	0:45	CORE	Load sinker bar and retrieve inner barrel.
0:45	1:15	0:30	CORE	Drop inner barrel.
				Retrieve sinker bar. Chase pumping with 50spm x 0.5MPa -> 2.3MPa (after landing).
1:15	1:45	0:30	CORE	Cut C0010E-3R core from 2938.5 to 2948.0mBRT (372.0-381.5mbsf). * While coring operation, keep pumping 5kL of Guar Gum and 5kL of SW alternately.
				WOB: 9-20kN. TRQ: 50rpm x 2.6-4.1kN-m. MP: 30spm x 1.55MPa. Ave.ROP: 22.0m/hr.
1:45	2:30	0:45	CORE	Load sinker bar and retrieve inner barrel.
2:30	2:45	0:15	CORE	Drop inner barrel.
				Retrieve sinker bar. Chase pumping with 50spm x 0.7MPa -> 2.3MPa (after landing).
2:45	3:15	0:30	CORE	Cut C0010E-4R core from 2948.0 to 2957.5mBRT (381.5-391.0mbsf). * While coring operation, keep pumping 5kL of Guar Gum and 5kL of SW alternately.
				WOB: 40-50kN. TRQ: 30rpm x 1.6-4.7kN-m. MP: 40spm x 1.6-2.0MPa. Ave.ROP:40.7m/hr.
3:15	4:15	1:00	CORE	Load sinker bar and retrieve inner barrel.
4:15	4:45	0:30	CORE	Drop inner barrel.
				Retrieve sinker bar. Attempt to start rotating and pumping after dropping inner barrel, Observe high TRQ (over 13kN-m) and Packoff indication (Max 3.7MPa).
				Suspect hole condition are getting severe. -> Make a decision to finish coring operation.
4:45	6:00	1:15	TRIP	POOH 10-5/8"RCB BHA to 2720mBRT.
				No excessive overpull.
				(05:15 - 06:00) Pump remained mud w/140spm x 13.0MPa @2736mBRT (169.5mbsf).

Bit Record

Bit No.	Size (in)	MFR	Type	IADC Code	S/No.	Nozzles	Depth (mBRT) From	Depth (mBRT) 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
RR3d	10-5/8"	BHI	BHC405C	M333	7152743	5 x 18/32"	2566.5	2,938.5	372.0	43.0	0	60	30	120	104.6								

BHA Record

3	RCB	10-5/8"Core bit x Long bit sub w/stab. x 8-1/2"Core Barrel x Top sub x Head sub x 10-5/8"Stabilizer x 8-1/2"Core DC (2) x XO x 10-5/8"Stabilizer x XO x 8-1/2"Core DC (6) x XO x 5-1/2"DP S-140 (38stds) x XO x 5-1/2"DP S-150

Hook Wt. (kN) @ 2938mBRT

Total Hook Weight	1,956
RCB BHA	140
HPS & Traveling block	750

Mud Properties

Mud Type	Time	Depth (mBRT)	MW	VIS	PV	YV	Gel St. (10", 10')	WL	Cake	pH	Pf	Cl-	Sand	Oil	Solid	K+	LGS	MBC	Temp In	Temp Out	n	K
PHG	17:00	-	1.05	300	53	88	66 89			9.2									21		0.46	7.99
SWG	11:00	-	1.04	122	16	52	16 17			12.3									21		0.30	10.16
Rester	16:00	-	1.03	85	26	42	17 20			9.8									21		0.47	3.70

HELICOPTER INFORMATION

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

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

No.	Liner Size	SPM	GPM	Press. (MPa)	Ann. Vel. (m/min)
1	6	40	400	4.0	73.4 (DC) 36.1 (DP)
2	6	40			
3					

Personnel @24:00

CDEX	6
Scientist	10
MQJ Crew	101
MQJ (Other)	1
MWJ	16
ROV	6
NuStar	0
Cementing (Sch)	1
ODI	0
Telnite	1
Franks	0
Swellpacker(Halliburton)	0
Total	142

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

Item	Received	Used	Stock
Barite (Bulk)			
Kunigel-VO (Bulk)		6,000	11,000
Calcium hydroxide		320	1,240
Caustic soda		400	725
XCD-Polymer			150
Defoamer 30C			160
Telnite GXL			144
Rester		920	360
Treat HS			1,000
* Barite (Bulk)			23,930
* Loaded materials @Shimizu			

Safety (HSE) and other information

Incident	Last Incident	No. LTA
LTA		
HUNS cards	10	
Remarks		

Geologic Information

From	To	Lithology of core

Materials Stock on Board @24:00

Item	Unit	Received	Used	Stock
Fresh Water	m3	0.0	55.4	281.4
Potable Water	m3	0.0	3.9	256.9
Drill Water	m3	87.3	54.4	2,236.8
Fuel	m3	0.0	52.2	6,210.5
Lube, Oil	Ltrs	0.0	0	113,200
Heli Fuel	Ltrs	0.0	0	0.0

Mud Volume (m3)	
Prehy Gel (1.05sg)	42
SWG (1.04sg)	20
Rester	237

BOAT INFORMATION

Boat Name	Status	Time Departed	Time Arrived
Heisei-maru	Off hire		
Akatsuki	Current survey	-	-

Marine Information @24:00

Heave (m)	0.4
Pitch (deg)	0.4
Roll (deg)	0.3
Vessel Heading (deg)	282
Riser Tension (ton)	-
V.D. Load (Moon)	14830.9
Max Draught (m)	9.00
Thruster (kW)	2,700

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	r	18.0	22.4	1011.3	8.6	219.0	9.4	1.3	10	7.2	4.0	114	19

Today's Schedule : POOH 10-5/8"RCB BHA, Rig down Guide Horn, Recover Transponder, Retrieve Cursor Rail.

Reported by : T. Yokoyama / T.Shiotani

Approved by : T. Saruhashi