Chikyu DAILY MORNING REPORT

Mission No. : CK18-04 **Exp. No. :** Exp 358 **Report No. :** 118

Site Name: C0002 Hole Name: C0002R Lat. 33° 18.0507'N Long. 136° 38.2029'E Seabed Depth : 1,967.5 mBRT RT-MSL : 28.5 m **Report Date :** 2/Feb/2019

Depth : @24:00 4,880.0 mBRT 2912.5 mbsf Progress : 0.0 m Drilling/Coring/Underreaming Hrs. : 0.00 hrs Last BOP PT: 1/28/19 Next BOP PT: 2/18/19

Depth : @06:00 4,880.0 mBRT 2912.5 mbsf LAST CASING : 9-5/8" x 11-3/4" ESET x 2,847.50 mbsf(4,815.0 mBRT) Last BOP FT: 1/25/19 Next BOP FT: 2/5/19

Summary of Operation on 1-Feb : WOW. RIH whipstock. Rig up WL. RIH Gyro. Conduct orientation survey. POOH Gyro. Set whipstock. Mill window. Last Glycol 35gal Inj. 1/29/19

Present Operation @ 06:00 on 2-Feb : Cont. Mill window. Dress window. Bottoms up. mBRT: meter below rotary table

Time Breakdown (00:00 - 24:00 on 1-Feb) mbsf: meter below sea floor

From	To	Hrs	Code	Depth(mBRT)	Detail of Operation
0:00	5:30	5:30	WAIT		Continue to wait on weather at 3,405mBRT.
					At 03:00: Attempt to RIH whipstock assembly, but observe 80kN drag once CMC off and continue to standby for recovery of weather condition.
					Weather information
					Time / Wind (m/s (Ave.) / m/s (Gust) / deg) / Wave (m / deg) / Current (knot / deg)
					00:00 20.0 / 22.6 / 352 3.0 / 010 1.4 / 245 T → G:0.8988 deg
					01:00 13.8 / 16.5 / 000 3.2 / 010 1.4 / 250 T → M:-7.1717 deg
					02:00 14.8 / 17.8 / 350 3.4 / 010 1.2 / 240 G → M:-8.0705 deg
					03:00 14.5 / 17.8 / 356 3.0 / 010 1.1 / 242 T: True North, M: Magnetic North, G: Grid North
					04:00 11.5 / 13.9 / 001 3.0 / 010 1.2 / 230
					05:00 9.4 / 11.1 / 338 2.5 / 010 1.2 / 229
5:30	12:00	6:30	OTHER(N)		Resume to RIH 10-3/4" whipstock assembly w/9-3/4"Tri-mill to 4,779mBRT.
					Fill up every 15stands. Control running speed by watching drag after WOW.
					Open CMC while passing through 11-3/4"liner hanger top and 9-5/8"ESET hanger top: Observe no excessive drag.
					Open CMC before tagging top of fish. Tag top of fish at 4,779mBRT.
12:00	13:15	1:15	OTHER(N)		Rig up wireline gyro equipment.
					Install 3 wireline sheaves at derrick and drill floor.
13:15	15:30	2:15	OTHER(N)		RIH Gyro assembly.
					Perform checkshot survey at 3,084mBRT (WL-depth). Land on UBHO at 4,742mBRT (WL-depth).
15:30	17:00	1:30	OTHER(N)		Conduct first orientation survey. Whipstock kick off face #1: 73.17deg, #2: 72.99deg, #3: 43.48deg, #4: 72.56.
					Suspect Gyro tool did not land on UBHO correctly on #3 gyro survey.
					Rotate drill pipe 90deg clockwise. Reciprocate string 3 round trips from 4,776mBRT to 4,750mBRT.
17:00	17:15	0:15	OTHER(N)		Conduct second orientation survey. #1: 149.71deg, #2: 152.22deg, #3: 150.78deg.
17:15	19:15	2:00	OTHER(N)		POOH gyro assembly from 4,836mBRT to surface.
					Lay out gyro tool on deck - good indication of correct landing based on sheared pin.
19:15	20:45	1:30	OTHER(N)		Set whipstock.
					Lower whipstock assembly and tag top of fish at 4,779mBRT. Mark #1 on drill pipe at rotary table.
					Pick up 5m from Mark #1 and paint Mark #2 at 0.5m below Mark #1. Lower string to 4,778.5mBRT (Mark #2 locate at rotary table, Tide -0.3m to MSL).
					Pressurize inside drill pipe to 23.8MPa and keep pressure for 10min.
					Apply 170kN slack off. Attempt to apply 170kN over pull, but observe sheared bolt indication w/50kN overpull, and pressure drop to 1.3MPa from 23MPa.
					Start pumping 100gpm x 7.8MPa and rotate string 10rpm x 12-13kNm.
					Lower string to confirm setting whipstock correctly. Torque increase to 26kNm and pressure drop to 2.7MPa at 4,769.8mBRT (Lead mill depth, Tide -0.5m to MSL).
					Suspect breaking plugged nozzle and confirm whipstock is set correctly.
					Top of whipstock is at 4,770mBRT with consideration of tide.
20:45	22:00	1:15	LOG		Rig down wireline equipment and sheave.
22:00	24:00	2:00	OTHER	4,772.5	Mill the window with whipstock from 4769.6mBRT (Tide: -0.7m to MSL) to 4772.5mBRT (Tide: -0.6m to MSL), Progress: 2.8m
					WOB:10-40kN, 600gpm x 15.4 - 22.6MPa, 60-100rpm x 14-30kN. Boost riser 450gpm, Ave. ROP 1.4m/hr. Pump 5m3 of BAROLIFT sweep every 1 hour.
					(00:00-01:00) Advisory status due to over 18m/s of wind speed.
					Ditch magnet: 2.0kg (Total 2kg from milling CSG window)
					No loss/gain in 24hrs

Time Breakdown (00:00 - 06:00 on 2-Feb) * The data on 00:00 - 06:00 is unofficial.

From	To	Hrs.	Code	Depth(mBRT)	Detail of Operation
0:00	1:15	1:15	OTHER	4,779.0	Continue to mill the window with whipstock from 4,772.5mBRT (Tide: 0.3m) to 4,779mBRT (Tide: 0.5m). Progress: 6.3m
					WOB: 5-40kN, 600gpm x 15.9MPa, 100rpm x 10-31kNm. Boost riser w/450gpm. Ave. ROP: 5.2m/hr. Pump 5m3 of BAROLIFT sweep every 1 hour.
					Torque decrease to 15-18kNm from 4,772mBRT and to 14-16kNm from 4,773.5mBRT.
1:15	2:30	1:15	OTHER	4,779.0	Dress the window.
					1. Ream up from 4,779 to 4,768mBRT: 30rpm x 10-20kNm. Observe torque increased to 25kNm at 4,770mBRT.
					2. Ream down from 4,768 to 4,779mBRT: 100rpm x 12-15kNm. Observe torque increased to 31kNm at 4,770mBRT and to 25kNm at 4,773mBRT.
					3. Ream up from 4,779 to 4,768mBRT: 60rpm x 11-14kNm. Observe torque increased to 31kNm at 4,770mBRT.
					4. Ream down from 4,768 to 4,779mBRT: 120rpm x 15-16kNm. Observe torque increased to 31kNm at 4,770mBRT.
					5. Ream up from 4,779 to 4,768mBRT: 60rpm x 13-15kNm. Observe no torque increased.
					6. Ream down from 4,768 to 4,771mBRT: 60rpm x 12-15kNm.
					7. Ream up from 4,771 to 4,768mBRT: 60rpm x 12-15kNm.
					8. Ream down from 4,768 to 4,771mBRT. 100rpm x 14-15kNm.
					9. Ream up from 4,771 to 4,769mBRT: 60rpm x 12-15kNm.
					10. Ream down from 4,769 to 4,774mBRT: 100rpm x 14-15kNm.
					11. Ream up from 4,774 to 4,768mBRT: 60rpm x 12-15kNm.
					Stop rotation and run back to 4,779mBRT to check drag while passing the window: Confirm no excessive drag.
					Check the bottom w/taking weight 80kN at 4,779.5mBRT.
2:30	3:45	1:15	C&C	4,779.0	Circulate and bottoms up w/700gpm x 20.5MPa.
					Pump BAROLIFT sweep 10m3, 15m3 and 15m3.
					Run back to bottom w/500gpm x 11MPa and 40rpm x 13kNm when BAROLIFT comes out from bit and start picking up.
					Observe torque increased to 25kNm at 4,770mBRT again while run back to inside casing at 3rd BAROLIFT sweep.
3:45	4:45	1:00	OTHER	4,779.0	Dress middle ramp at 4,771mBRT.
					Ream down w/60rpm to check the torque and observe torque increased to 25kNm.
					Stop rotation and confirm no excessive drag w/o rotation at 4,771mBRT.
					Dress middle ramp w/100rpm until torque becomes stable.
					Ream up w/60rpm x 13kNm and down w/100rpm x 16kNm three times, and confirm excessive torque is removed.
					Ream down to 4,779mBRT and up to 4,768mBRT w/60rpm to check the torque again: Okay.
4:45	6:00	1:15	C&C	4,779.0	Resume to circulate and bottoms up w/700gpm x 20.4MPa inside casing at 4,767mBRT.

Bit Record @24:00

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)	ROP (m/hr)	Dull Condition Inner	Outer	Dull	Loc.	B	G	O.D.	RP

BHA Record @24:00

24	Whipstock	10-3/4"Whipstock x 9-3/4"Tri-mill x 6-1/2"OD Running Tool x XO x 5.68"HWDP x XO x 6-1/2"UBHO x XO x 6-3/4"Coring DC (9) x XO x XO x 7"Coring DC (12) x XO x XO x 5.68"HDWP (12) x XO

Hook Wt. (knt) @24:00 4,772.5 mBRT

Hook Load	3,050
BHA	210
Below DC	170
below Jar	0
HPS & Traveling block	630
Hook + RRT	-
Hook block	-

Jar Rotating time 24:0 S/N:

Today		Total	hrs

Cutting skip @24:00

Empty	Full	Total
52	0	52

ROV @24:00

Status	Diving
Last Dive	2/1/19
Injection Skid	Dive w/135 gal skid

Mud Properties @24:00

Mud Type	Time	Depth (mBRT)	MW	VIS	PV	YV	6rpm	Gel St. (10", 10')	API	Cake	pH	Pf	Cl-	Sand	Oil	Solid	MBC	Temp In	Temp Out	K+	n	K	LGS	FIT 20/40 (mm) 0 min	FIT 20/40 (mm) 5min
KNPP	2:00	Pit	1.39	61	22	24	8	7 13	7.3	1.1	10.0	0.1	120,700	0.20		19.0	2.25	13		20,900	0.47	2.09	6.40	-	-
KNPP	19:00	Pit	1.39	57	23	25	8	7 15	7.5	1.1	10.0	0.1	120,700	0.20		19.0	2.25	15		20,900	0.47	2.09	6.40	-	-

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

No.	Liner Size	SPM	GPM	Press. (MPa)	Ann. Vel. (m/min) 6.75"DC	Ann. Vel. (m/min) 5.5"DP
1	6"	60	300	16.0	64	50
2	6"	60	300			
3	6"(Booster)	90	450			

Personnel @24:00

CDEX	9
MQJ Crew	101
MWJ	15
Scientist	8
MQJ (Other)	1
Telnite	2
Oceaneering	6
SLB Cementing	2
SLB WL	3
Geoservices	6
M-I SWACO	4
SLB Underreamer	2
SLB LWD	2
SLB Seismic	0
AFGlobal	0
ENVENTURE	0
SLB DD	2
Franks	0
Gyrodata	1
Total	164

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

Item	Received	Used	Stock
Barite (Bulk)		5,000	364,500
Caustic Soda			1,050
Lime			200
Soda Ash			575
Caustic Potash			1,075
Tel-Polymer DX / L / H			640/380/0
XCD-Polymer			950
Lignate NC			4,500
Clean Lube W			8,000
Tel Clean W			4,600
Astex-S			4,400
Deformer 30C			512
Tell DD			3,200
Bi-Carbonate			1,000
Citric Acid			2,275
Tan Cal C / M / F			210 / 1,020 / 510
Telnite GXL			684
Treat-HS			9,200
Mud Seal P			130
Tel Plug C / M / F			500 / 500 / 500
Tel Stop P / G			500 / 260
Barolift (lbs)			1,935
Driscal D			0
Tel Flow P			0
Poro Seal			0
Steel Seal 50 (lbs)			1,000
KCl			0
NaCl			0
Fracseal (lbs)		9,000	0
Stopseal (lbs)			0
Bentonate(Bulk)			46,000

Heli Information @24:00

Flt. No.	Time Arrived	Time Departed	Passenger Are.	Passenger Dept.
1	9:13	9:22	5	8
2	11:25	11:31	3	4
3				
4				

Geologic Information @24:00

From	To	Lithology of cuttings

Shale Shaker / Centrifuge @24:00

No.1	30, 170	No.4	30, 170	#1-#3 Centrifuge running time
No.2	30, 170	No.5	30, 170	
No.3	30, 170	No.6	30, 170	

Materials Stock on Board @24:00

Item	Unit	Stock	Used	Received
Fresh Water	m3	326.7	81.3	96.2
Potable Water	m3	242.6	4.6	0.0
Drill Water	m3	1,118.4	11.6	0.0
Fuel	m3	3,555.7	45.4	0.0
Lube, Oil	Ltrs	69,100	400.0	0.0
Heli Fuel	Ltrs	0.0	0.0	0.0
Cement "GWC"	ton	160.0	0.0	0.0
Cement "G"	ton	97.0	0.0	0.0

Mud volume@24:00

Mud Volume (m3)	
KNPP mud (1.39)	336
KNPP (12ppbFracseal)	311
KNPP (30ppbFracseal)	111
KNPP (BAROLIFT)	57
KNP mud (1.13)	327
STOPLOSS(1.37)	47
Slug	15
total	1204

Boat Information @24:00

Boat Name	Status	Time @Chikyu Departed	Time @Chikyu Arrived
#8 Meiji-maru			12:00
Akatsuki	Chikyu		
Shincho-maru	Shingu	3:00	

Safety (HSE) and other information

Incident	Last Incident	No. LTA
LTA		
HUNS cards	20	

Remarks

Marine Information @24:00

Heave (m)	0.6
Pitch (deg)	0.4
Roll (deg)	0.1
Vessel Heading (deg)	010
Riser Tension (kN)	9750.0
V.D. Load (ton)	12039
Max Draught (m)	9.0
Thruster (kW)	650

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	8.0	16.9	1021.2	10.3	300	12.5	1.7	210	5.6	0.9	255	22.0

Today's Schedule: Continue to circulate and bottoms up. POOH to surface. MU&RIH 8-1/2"Kick off BHA.

Reported by : T.Nishiyama / T.Yokoyama

Approved by : T.Saruhashi / T.Ikawa