Chikyu DAILY MORNING REPORT

Mission No. : CK18-04 **Exp. No. :** Exp 358 **Report No. :** 53

Site Name C0002 **Hole Name** C0002Q **Lat.** 33° 18.0507'N **Long.** 136° 38.2029'E Seabed Depth : 1,967.5 mBRT RT-MSL : 28.5 m **Report Date :** 29/Nov/2018

Depth : @24:00 4,990.0 mBRT 3022.5 mbsf Progress : 0.0 m Drilling/Coring/Underreaming Hrs. : 0.00 hrs Last BOP PT: 11/15/18 Next BOP PT: 12/6/18

Depth : @06:00 4,990.0 mBRT 3022.5 mbsf LAST CASING : 11-3/4" x 2,922.50 mbsf(4,890.0 mBRT) Last BOP FT: 11/22/18 Next BOP FT: 11/29/18

Summary of Operation on 28-Nov : RIH hole opening assembly from 4,520mBRT to 4,845mBRT. Wash and ream down to 4,917mBRT.

Present Operation @ 06:00 on 29-Nov : Cont. ream down to 4,935mBRT.

Time Breakdown (00:00 - 24:00 on 28-Nov) Last Glycol 35gal Inj. 11/27/18

mBRT: meter below rotary table

mbsf: meter below sea floor

From	To	Hrs	Code	Depth(mBRT)	Detail of Operation
0:00	1:45	1:45	TRIP	4,990.0	RIH 8-1/2"x12-1/4" hole opening assembly from 4,520mBRT to 4,845mBRT.
					Fill up string. Take SCR. MP#1: 100-150-200gpm x 450-500-590psi, MP#3: 100-150-200gpm x 400-490-590psi.
1:45	2:15	0:30	TRIP	4,990.0	Conduct LWD function test at 4,845mBRT.
					Confirm LWD function w/450gpm x 12.2MPa by synchronizing MP#1&3. Calibrate downhole torque and WOB.
					Confirm LWD function w/450gpm x 12.2MPa by synchronizing MP#1&3. Calibrate downhole torque and WOB.
2:15	2:30	0:15	W&R	4,990.0	Wash down from 4,845mBRT to 4,869mBRT.
					WOB: 0-80kN, MP: 450gpm x 12.2MPa. Observe taking weight of 70kN at 4,864mBRT and 80kN at 4,970mBRT.
2:30	9:00	6:30	W&R	4,990.0	Ream down from 4,869mBRT to 4,907mBRT.
					WOB: 0-60kN , HPS: 5rpm x 7.5-8.5kNm, MP: 450-500-550gpm x 12.2-14.4-19.0MPa.
					Observe taking weight of 110kN at 4,873.5mBRT (Stabilizer at the top of window and the depth resistivity changes) and HPS stall.
					Increase HPS speed to 10-20-40rpm. Observe HPS stall many times, but pressure does not increase.
					Increase HPS speed to 60rpm and string pass through 4,873.5mBRT.
					Wipe the string before connection and reduce HPS speed to 20rpm after connection.
					Continue ream down w/20rpm x 12.0-20.0kN and 500gpm x 14.0MPa with multiple HPS stall events.
					@06:30 Stall HPS at 4,902mBRT, but pressure does not increase.
					@06:45 Observe HPS stall and pressure increasing gradually from 14.5MPa to 16.3MPa at 500gpm at 4,904mBRT.
					@07:15 Stall HPS at 4,898mBRT, but pressure does not increase. Note: Trip #5 shale shaker and recover same.
					Pump 5m^3 of 12ppb Fracseal.
					Increase rotation speed to 60rpm x 14.5-17.0kNm.
					@07:45 Stall HPS at 4,904mBRT, but pressure does not increase.
9:00	16:00	7:00	W&R	4,990.0	Continue to ream down from 4,907mBRT to 4,911mBRT.
					@09:15 Observe HPS stall and pressure increasing gradually from 15.7MPa to 17.1MPa at 500gpm at 4,908.5mBRT.
					@09:30 Stall HPS at 4,906.5mBRT, but pressure does not increase.
					@09:45 Observe HPS stall and pressure increasing gradually from 15.3MPa to 16.4MPa at 500gpm at 4,905.5mBRT.
					Increase torque limit to 26kNm.
					@10:30 Observe HPS stall and pressure increasing gradually from 15.6MPa to 16.3MPa at 500gpm at 4,909mBRT.
					@10:45 Observe HPS stall and pressure increasing gradually from 15.7MPa to 17.0MPa at 500gpm at 4,908mBRT.
					Increase rotation speed to 65rpm x 15.0-19.0kNm.
					@12:30 Observe HPS stall and pressure increasing gradually from 15.3MPa to 15.9MPa at 500gpm at 4,909mBRT.
					Pump 5m3 of 12ppb Fracseal.
					Increase torque limit to 28kNm.
					@13:45 Observe HPS stall and pressure increasing gradually from 15.2MPa to 16.1MPa at 500gpm at 4,911mBRT.
					Increase torque limit to 30kNm and RPM to 70. Note: Activate centrifuge to maintain mud weight at 1.37sg from 12:45 to 19:00.
					@15:00 Observe HPS stall and pressure increasing gradually from 13.9MPa to 15.1MPa at 450gpm at 4,909mBRT.
16:00	0:00	8:00	W&R	4,990.0	Continue to ream down from 4,911mBRT to 4,917mBRT.
					WOB: 0-60kN , HPS: 70rpm x 15-30kNm, MP: 400-500gpm x 12.6-16.0MPa.
					@18:30 Observe HPS stall without increasing pressure at 4,916mBRT. Stall HPS several times when establishing parameter after each stalls.
					@21:30 Observe HPS stall and pressure increasing gradually from 17.5MPa to 19.6MPa at 500gpm at 4,917mBRT.
					Pump 3m^3 of 12ppb Fracseal at 17:30 and 22:45.
					Note: Power supply to Geoservices unit shut down at 15:00 due to failure of 24V power supply module.
					Switch to Power Bypass Mode and recover power supply to the unit without pressurizing function inside the ur
					(21:30 - 24:00) Change "Advisory" status due to over 18m/s of window speed.
					Offline Activities
					- Offloaded 1x Z-Reamer and 6x cutting skips to Akatsuki.
					- Continue to recover Fracseal from cuttings using manual screens at cuttings settling tank area.
					Ditch magnet: 7kg (Total 131.3kg)

Time Breakdown (00:00 - 06:00 on 29-Nov) * The data on 00:00 - 06:00 is unofficial.

From	To	Hrs.	Code	Depth(mBRT)	Detail of Operation
0:00	6:00	6:00	W&R	4,990.0	Continue to ream down from 4,917mBRT to 4,935mBRT.
					WOB: 0-50kN, HPS: 70rpm x 15-30kNm, MP: 400-500gpm x 11.0-15.8MPa.
					Standpipe pressure drops from 14.5MPa to 12.4MPa with 400gpm at 4,918mBRT (unplugging bit nozzles).
					Increase pump rate to 500gpm x 15.8MPa from 4,919mBRT, and increase HPS torque from 15kNm to 30kNm.
					Observe slightly HPS stall after increasing pump rate to 500gpm.
					Reduce pump rate to 400gpm, and decrease HPS torque to 15-18kNm.
					Standpipe pressure drops from 12.6MPa to 11.6MPa (unplugging bit nozzles).
					Observe standpipe pressure increase from 11.2MPa to 12.4MPa with 400gpm at 4,934mBRT.
					Decrease standpipe pressure to 11.3MPa at 4,834.5mBRT.
					Pump 3m3 of 12ppb fracseal after connection.
					(00:00 - 00:30) Back to "Green" status.
					Recover ROV to surface to check "Analogue input".

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 (knt) Min.	WOB (knt) Max.	rpm Min.	rpm Max.	Total Rev. (kern)	Dull Condition Inner	Outer	Dull	Loc.	B	G	O.D.	RP
RR4b	8.5	Smith	xeblade X616	M323	QF3233	3x12/32, 3x13/32					0	60	5	70									

BHA Record @24:00

#13	8.5"x12.25" HO	8-1/2" Bit x Bit sub w/non-ported x XO x arcVision675 x TeleScope675 x XO x 8-1/4"Stabilizer x 6-3/4"DC (1) x Z-Reamer x Float sub w/non-ported float x 6-3/4"DC (11) x XO x 6-3/4"Coring DC (3) x XO x 8-1/2"DC (3) x 8"Jar x 8-1/2"DC (3) x XO x 5.68"HWDP (3stds) x XO

Hook Wt. (knt) @24:00	4,913.0	mBRT
Hook Load		3,250
BHA		360
Below HWDP		290
below Jar		230
HPS & Traveling block		620
Hook + RRT		-
Hook block		-

Jar Rotating time 24 S/N: 1762-5074

Today	0.00	Total	23.00	hrs

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	8:30	4,902	1.37	62	25	32	12	11	15	2.9	0.6	9.9	0.2	138,000	0.60		17.0	0.75	11	9	20,900	0.41	3.63	3.00	21	85
KNPP	18:00	4,915	1.37	61	23	34	12	11	16	3.0	0.7	9.9	0.1	135,000	0.60		17.0	0.75	11	8	21,400	0.39	3.94	3.10	17	38

Cutting skip @24:00

Empty	Full	Total
46	10	56

ROV @24:00

Status	In water
Last Dive	11/27/18
Injection Skid	135 /135 gal

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

No.	Liner Size	SPM	GPM	Press. (MPa)	Ann. Vel. DC (m/min)	Ann. Vel. DP (m/min)
1	6"	40	200	14.0	42	34
2	6"(Booster)	90	450			
3	6"	40	200			

Personnel @24:00

CDEX	9
MQJ Crew	103
MQJ (Other)	0
MWJ	15
Scientist	13
Telnite	2
Oceaneering	6
SLB Cementing	2
SLB WL	2
Geoservices	6
M-I SWACO	4
SLB Underreamer	2
SLB LWD	2
SLB Seismic	1
AFGlobal	2
ENVENTURE	4
SLB DD	2
Franks	2
Total	177

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

Item	Received	Used	Stock
Barite (Bulk)		4,500	629,000
Caustic Soda			1,200
Lime			200
Soda Ash			1,825
Caustic Potash		100	2,500
Tel-Polymer DX / L / H			3780/2000/0
XCD-Polymer		75	1,850
Lignate NC			4,500
Clean Lube W			9,000
Tel Clean W			6,400
Astex-S			5,300
Deformer 30C			368
Tell DD			3,200
Bi-Carbonate			1,250
Citric Acid			2,275
Tan Cal M / F / FF			1,020 / 210 / 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
Balolift			105
Driscal D			0
Tel Flow P			0
Poro Seal			2,310
Steel Seal 50			4,750
KCl			11,000
NaCl			28,000
Fracseal			7,000
Stopseal			8,000
Bentonate(Bulk)			46,000

Geologic Information @24:00

From	To	Lithology of cuttings

Shale Shaker @24:00 Centrifuge: hrs

No.1	30, 50 x 2ea	No.4	20, Dummy x 2	No.1	off
No.2	20, 50 x 2ea	No.5	30, 50 x 2ea	No.2	off
No.3	30,Dummy x 2	No.6	20, 50 x 2ea	No.3	off

Materials Stock on Board @24:00

Item	Unit	Stock	Used	Received
Fresh Water	m3	301.0	94.6	101.1
Potable Water	m3	298.0	6.0	0.0
Drill Water	m3	1,697.0	17.0	0.0
Fuel	m3	6,408.6	51.0	0.0
Lube, Oil	Ltrs	110,800	0.0	0.0
Heli Fuel	Ltrs	0.0	0.0	0.0
Cement "GWC"	ton	186.0	0.0	0.0
Cement "G"	ton	97.0	0.0	0.0

Mud volume@24:00

Mud Volume (m3)	
KNPP mud (1.33)	13
KNPP mud (1.37)	472
Slug mud	16
total	501

Heli Information @24:00

Flt. No.	Time Arrived	Time Departed	Passenger Are.	Passenger Dept.
1	9:03	9:13	9	9
2	11:11	11:21	8	5
3				
4				

Safety (HSE) and other information

Incident	Last Incident	No. LTA
LTA		
HUNS cards	40	

Remarks

Boat Information @24:00

Boat Name	Status	Time @Chikyu Departed	Time @Chikyu Arrived
#8 Meiji-maru	NE 5mile		
Akatsuki	Chikyu		
Shincho-maru	Shingu		

Marine Information @24:00

Heave (m)	0.5
Pitch (deg)	0.2
Roll (deg)	0.2
Vessel Heading (deg)	000
Riser Tension (kN)	9600.0
V.D. Load (ton)	15204
Max Draught (m)	9.0
Thruster (kW)	1700

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	15.0	20.2	1017.2	18.2	1	20.4	2.5	0	5.6	0.3	172	16.0

Today's Schedule: Cont. ream down to 4,990mBRT. Circulation and bottoms up.

Reported by : A. Suzuki / T. Yokoyama

Approved by : T. Ikawa