Chikyu DAILY MORNING REPORT

Mission No. : CK24-01 **Exp. No. :** 405 **Report No. :** 14

Site Name JTCT-01A **Hole Name** C0019H **Lat.** 37°56.3404'N **Long.** 143°54.7907'E Seabed Depth : 6,926.0 mBRT RT-MSL : 28.5 m **Report Date :** 20/Sep/2024

Depth : @24:00 7,711.0 mBRT 785.0 mbsf Progress : 563.5 m Drilling/Coring/Underreaming Hrs. : 24.00 hrs

Depth : @06:00 7,777.0 mBRT 851.0 mbsf LAST CASING : x mbsf(mBRT)

Summary of Operation on 19-Sep : Drill 8-1/2"LWD hole(C0019H) to 7,711.0mBRT. -

Present Operation @ 06:00 on 20-Sep : Drill 8-1/2"LWD hole(C0019H) to 7,777.0mBRT.

mBRT: meter below rotary table

Time Breakdown (00:00 - 24:00 on 19-Sep) mbsf: meter below sea floor

From	To	Hrs	Code	Depth(mBRT)	Detail of Operation
0:00	24:00	0:00	DRL	7,711.0	Drill 8-1/2"LWD hole (C0019H) to 7,711.0mBRT (785.0mbsf)
					Sweep 5m3 of SWG every stand.
					7,147.5mBRT - 7,185.6mBRT (221.5 - 259.6mbsf) WOB 0-30kN, HPS 80rpm x 0.1-10.0kNm, MP 550gpm x 17.5-18.2MPa. Set ROP 45m/hr
					Observe stick-slip decreasing from MLWD real time data.
					7,185.6mBRT - 7,299.8mBRT (259.6 - 373.8mbsf) WOB 0-30kN, HPS 80rpm x 0.1-127.0kNm, MP 550gpm x 17.8-18.9MPa. Set ROP 45m/hr
					7,299.8mBRT - 7,452.6mBRT (373.8 - 526.6mbsf) WOB 0-30kN, HPS 80rpm x 0.1-14.6kNm, MP 550gpm x 18.1-19.1MPa. Set ROP 50m/hr
					Observe stick-slip increasing from MLWD real time data.
					Sweep 7m3 of SWG every stand.
					7,452.6mBRT - 7,582.5mBRT (526.6 - 656.5mbsf) WOB 0-40kN, HPS 80rpm x 0.1-15.0kNm, MP 550gpm x 18.0-19.2MPa. Set ROP 50m/hr
					Pick up 2m off bottom because stick-slip is observed continuously (more than 10min).
					Change ROP setting from 50m/hr to 45m/hr for attempting to minimize stick-slips.
					7,582.5mBRT - 7,669.0mBRT (656.5 - 743.0mbsf) WOB 0-40kN, HPS 80rpm x 0.1-14.5kNm, MP 550gpm x 17.9-19.3MPa. Set ROP 45m/hr
					Pick up 2m off bottom because stick-slip is observed continuously (more than 10min).
					Reduce ROP set from 45m/hr to 43m/hr for attempting to minimize stick-slips.
					7,669.0mBRT - 7,680.5mBRT (743.0 - 754.5mbsf) WOB 0-40kN, HPS 80rpm x 0.1-11.5kNm, MP 550gpm x 18.4-19.0MPa. Set ROP 43m/hr
					Reduce ROP set from 43m/hr to 40m/hr for attempting to minimize stick-slips.
					7,680.5mBRT - 7,701.0mBRT (754.5 - 775.0mbsf) WOB 0-40kN, HPS 80rpm x 0.1-10.2kNm, MP 550gpm x 18.2-19.2MPa. Set ROP 40m/hr
					Reduce ROP set from 40m/hr to 30m/hr for attempting to minimize stick-slips.
					7,701.0mBRT - 7,711.0mBRT (775.0 - 785.0mbsf) WOB 0-40kN, HPS 80rpm x 0.1-12.2kNm, MP 550gpm x 18.0-18.7MPa. Set ROP 30m/hr

MWD data

mBRT	inclination (deg.)	azimuth (deg).
#####	0.54	235.52
#####	0.59	238.35
#####	0.33	275.32
#####	0.33	330.97
#####	0.72	224.87
#####	0.7	229.79
#####	3.53	19.78
#####	1.24	226.46

Time Breakdown (00:00 - 06:00 on 20-Sep) * The data on 00:00 - 06:00 is unofficial.

From	To	Hrs.	Code	Depth(mBRT)	Detail of Operation
0:00	6:00	6:00	DRL	7,777.0	Drill 8-1/2"LWD hole (C0019H) to 7,777.0mBRT (851.0mbsf)
					Sweep 7m3 of SWG every stand.
					7,711.0mBRT - 7,719.0mBRT (785.0 - 793.0mbsf) WOB 0-40kN, HPS 80rpm x 0.1-13.8kNm, MP 550gpm x 18.2-18.9MPa. Set ROP 30m/hr
					Reduce ROP set from 30m/hr to 20m/hr for attempting to minimize stick-slips.
					7,719.0mBRT - 7,728.0mBRT (793.0 - 802.0mbsf) WOB 0-30kN, HPS 80rpm x 0.1-9.4kNm, MP 550gpm x 18.1-18.9MPa. Set ROP 20m/hr
					Reduce ROP set from 20m/hr to 15m/hr for attempting to minimize stick-slips.
					7,728.0mBRT - 7,752.0mBRT (802.0 - 826.0mbsf) WOB 0-30kN, HPS 80rpm x 0.1-14.2kNm, MP 550gpm x 17.8-18.8MPa. Set ROP 15m/hr
					Reduce ROP set from 15m/hr to 10m/hr for attempting to minimize stick-slips.
					7,752.0mBRT - 7,775.0mBRT (826.0 - 849.0mbsf) WOB 0-20kN, HPS 80rpm x 0.1-14.3kNm, MP 550gpm x 18.2-19.0MPa. Set ROP 10m/hr
					Estimated plate boundary: 7,740mBRT(814mbsf)
					Estimated chert top: 7,752, 7,756, or 7,758mBRT(826, 830, or 832mbsf)
					Observe HPS torque reach set point(15kNm) several times, but not stall out.
					Reduce ROP set from 10m/hr to 8m/hr.
					7,775.0mBRT - 7,777.0mBRT (849.0 - 851.0mbsf) WOB 0-20kN, HPS 80rpm x 0.1-14.4kNm, MP 550gpm x 18.1-18.8MPa. Set ROP 8m/hr
					Meanwhile,
					(00:45) Akatsuki arrives at Chikyu.
					(00:45) Ibuki departs to Shiogama port. (ETA@Shiogama: 9/20 17:00)
					(01:30-03:00) Advisory Status due to APRS issue by the noise from Akatsuki

MWD data

mBRT	inclination (deg.)	azimuth (deg).
7,735.5	0.6	255.1

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
RR1b	8.5	Smith	BXZ716M	-	QG1125	7 x 12	6,926.0	7,711.0	785.0	94.50	0	40	55	80	189.99	45.2								

BHA Record @24:00

3	8-1/2"LWD	8-1/2" Bit x 6-1/2" Mud motor x MicroScope x TeleScope x SonicScope x 6-3/4" drilling DC(1jt) x Float sub w/float x Filter sub x 6-3/4" drilling DC(2stds) x 6-1/2 TM Jar x 6-3/4" drilling DC(1std) x XO#1 x 5" DP V-150 (24stds) x XO#2 x 5" DP S-140 (66stds) x 5-1/2" DP S-140 (22stds) x XO#3 x 5-1/2" DP S-150(27stds) x XO#4 x 5-1/2" DP UD-165 (30stds) x XO#5 x 6-5/8" DP Z-140 (10stds) x

Hook Wt. (knt) @24:00 7,711.0 mBRT

Hook Load	4,096
BHA	146
Below Jar	120
HPS & Traveling block	680
CSG/TBG	

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	5min

Jar Rotating Time @24:00 S/N: 474-69575

Today	13.27	Total	26.68	hrs

Motor Pumping time @24:00 S/N: 02240026-0424T2

Today	20.50	Total	45.25	hrs

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

No.	Liner Size	SPM	GPM	Press. (MPa)	Ann. Vel. (m/min) 6"DC	Ann. Vel. (m/min) 5"DP
1	6"	60	55	21.0	28	18
2	6"	60	55			
3	6"					

Personnel @24:00

MarE3	4
MQJ Crew	97
MWJ	6
Scientist	27
LSS	2
Outreach	
JAMSTEC	
Sub-contractor	
W	
SLB-LWD	4
Expro	
NuStar	3
Total	143

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

Item	Received	Used	Stock
Barite			76,000
Tel-Gel			208,000
Caustic soda			9,175
Lime			9,120
Flowzan			25

Heli Information @24:00

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

Boat Information @24:00

Akatsuki (Supply boat)	Status	On the way to Chikyu
Ibuki (Guard boat)	Status	Current survey

Materials Stock on Board @24:00

Item	Unit	Stock	Used	Received
Fresh Water	m3	262.0	53.3	67.6
Potable Water	m3	303.0	3.0	0.0
Drill Water	m3	1,694.0	0.0	0.0
Fuel	m3	6,478.5	43.7	0.0
Lube, Oil	Ltrs	134,200	0.0	0.0
Heli Fuel	Ltrs	0.0	0.0	0.0

Mud volume

PHG (m3)	332
Kill mud (m3)	60
SWG (m3)	92
Pre-Mix (m3)	65

Marine Information @24:00

Heave (m)	0.7
Pitch (deg)	0.3
Roll (deg)	0.1
Vessel Heading (deg)	227
Riser Tension (kN)	-
V.D. Load (ton)	15457
Max Draught (m)	9.0
Thruster (kW)	1300

HSQE and other information

Incident	Last Incident	No. LTI
LTI	11/14/19	
HUNS cards	38	

Remarks

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	24.0	28.5	1016.7	1.6	161	2.5	3.0	200	8.5	2.5	61	22.0

Well Cost (1,000 Yen) based on the cost by

Daily	
Cumulative	

Today's Schedule: Drill 8-1/2"LWD hole.

Reported by : T.Yokoyama, Y.Oishi

Approved by : T.Saruhashi