Chikyu DAILY MORNING REPORT

Mission No. : CK24-01 **Exp. No. :** 405 **Report No. :** 13

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 :** 19/Sep/2024

Depth : @24:00 7,147.5 mBRT 221.5 mbsf Progress : 221.5 m Drilling/Coring/Underreaming Hrs. : 12.25 hrs

Depth : @06:00 7,299.8 mBRT 373.8 mbsf LAST CASING : x mbsf(mBRT)

Summary of Operation on 18-Sep : Circulation pressure check, Troubleshoot RGR door, Dive and recover UWTV, Drill 8-1/2"LWD hole(C0019H) to 7,147.5mBRT. -

Present Operation @ 06:00 on 19-Sep : Drill 8-1/2"LWD hole(C0019H) to 7,299.8mBRT.

mBRT: meter below rotary table

Time Breakdown (00:00 - 24:00 on 18-Sep) mbsf: meter below sea floor

From	To	Hrs	Code	Depth(mBRT)	Detail of Operation
0:00	0:45	0:45	LOG		Conduct circulation pressure check at 6,837.0mBRT.
					(00:00-00:30) Conduct LWD shallow hole test: unable to receive signal with 475gpm, then increase to 500gpm: OK
					(00:30-00:45) Check Circulating pressure 100, 200, 300, 400, 500, 600gpm x 2.0, 3.6, 6.3, 10.0, 14.8, 20.9MPa.
					Meanwhile, try to open RGR door without success.
0:45	2:30	1:45	OTHER(N)		Troubleshoot RGR door
					Open RGR door by using tugger line .
2:30	5:30	3:00	UWTV		Dive UWTV to 6,800m and skid RGR to swallow drill pipe leaving RGR door open.
					Meanwhile,
					(03:15-05:30) Drift with 0.5knot from 1.0NM SSE JFAST well.
					(03:30) Conduct downlink for LWD tools.
					(03:45) Observe UWTV cable dragged to Port side, change heading 25deg. Stbd side.
5:30	7:00	1:30	MOVE		Move vessel to LWD hole(C0019H).
					(05:30-06:30) Lower LWD assembly and UWTV, and find JFAST Observatory's wellhead, while pump with 150gpm.
					(06:30-06:45) Move vessel to LWD hole (C0019H), while pump with 150gpm.
					(06:45-07:00) Tag on seabed at 6,925.0mBRT, observe hole nearby planned location by UWTV camera.
					Decide to change the location of LWD hole(C0019H) 5m from planned location in the direction of 208deg.
					Tag on seabed of updated location at 6,926.0mBRT (Cordinates: 37°56.3404'N, 143°54.7907'E)
7:00	12:15	5:15	DRL	7,016.0	Spud 8-1/2"LWD hole (C0019H) and Wash down 6,926.0 - 7,016.0mBRT(0.0 - 90.0mbsf)
					(06:57)Spud 8-1/2"LWD hole (C0019H)
					WOB 0-30kN, MP 500gpm x 15.3-15.8MPa.
					Reciprocate string 3m every 3m advance.
12:15	15:15	3:00	UWTV	7,016.0	Recover UWTV to surface.
					Find the arm of guide sleeve extension broken and weld the same.
15:15	17:00	1:45	OTHER	7,016.0	Set RGR.
					Close RGR door by chain block.
					The bolt hole alignment for RGR door is slightly gapped and adjust the alignment.
					Install retainer plate underneath of RGR head, but the gap happened again, adjust the alignment.
17:00	24:00	7:00	DRL	7,147.5	Drill 8-1/2"LWD hole (C0019H) to 7147.5mBRT (221.5mbsf)
					7,016.0 - 7,033.0mBRT (90.0 - 107.0mbsf) WOB 0-15kN, HPS 55rpm x 0.1-4.0kNm, MP 500gpm x 15.0-15.3MPa. Set ROP 30m/hr.
					Sweep 5m3 of SWG, Take survey; 0.54deg@7,014.1mBRT.
					7,033.0 - 7,054.0mBRT (107.0 - 128.0mbsf) WOB 0-20kN, HPS 65rpm x 0.1-6.0kNm, MP 500gpm x 15.0-15.2MPa. Set ROP 45m/hr.
					7,054.0 - 7,071.0mBRT (128.0 - 145.0mbsf) WOB 0-20kN, HPS 70rpm x 0.1-5.5kNm, MP 500gpm x 15.0-15.1MPa. Set ROP 45m/hr.
					Sweep 5m3 of SWG, Take survey; 0.55deg@7,069.0mBRT.
					7,071.0 - 7,126.0mBRT (145.0 - 200.0mbsf) WOB 0-30kN, HPS 75rpm x 0.1-7.0kNm, MP 500gpm x 15.0-15.5MPa. Set ROP 45m/hr.
					Sweep 5m3 of SWG, Take survey; 0.59deg@7,090.3mBRT.
					Observe RGR rotation stopped sometimes due to high side force from drill string by magnus effect.
					7,126.0 - 7,147.5mBRT (200.0 - 221.5mbsf) WOB 0-30kN, HPS 75rpm x 0.1-8.0kNm, MP 550gpm x 17.8-18.2MPa. Set ROP 45m/hr.
					Sweep 5m3 of SWG.
					Increse pump rate to 550gpm from 500gpm because MLWD signal becomes weak.
					Observe stick-slip from MLWD real time data.
					Meanwhile,
					(17:45) Akatsuki arrives at Chikyu.
					(18:30-19:50) Advisory Status due to APRS issue by the noise from Akatsuki
					Akatsuki approaches to Chikyu for offloading of TeleScope.
					(20:00) Akatsuki departs to Shiogama port. (ETA@Shiogama: 9/19 10:00)

Time Breakdown (00:00 - 06:00 on 19-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	7,299.8	Drill 8-1/2"LWD hole (C0019H) to 7,299.8mBRT (373.8mbsf)
					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
					Sweep 5m3 of SWG, Take survey; 0.33deg@7,163.7mBRT.
					Observe stick-slip decreasing from MLWD real time data.
					7,185.6mBRT - 7,224.4mBRT (259.6 - 298.4mbsf) WOB 0-30kN, HPS 80rpm x 0.1-12.7kNm, MP 550gpm x 17.8-18.7MPa. Set ROP 45m/hr
					Sweep 5m3 of SWG.
					7,224.4mBRT - 7,262.2mBRT (298.4 - 336.2mbsf) WOB 0-30kN, HPS 80rpm x 0.1-9.6kNm, MP 550gpm x 17.8-18.7MPa. Set ROP 45m/hr
					Sweep 5m3 of SWG, Take survey; 0.33deg@7,239.3mBRT.
					7,262.2mBRT - 7,299.8mBRT (336.2 - 373.8mbsf) WOB 0-30kN, HPS 80rpm x 0.1-10.3kNm, MP 550gpm x 17.9-18.9MPa. Set ROP 45m/hr
					Sweep 5m3 of SWG.

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	7,147.5	221.5	81.23	0	30	55	75	8.54	49.8								

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 H-M 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 7,147.5 mBRT

Hook Load	3,650
BHA	146
Below Jar	120
HPS & Traveling block	680
CSG/TBG	

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

Today	8.17	Total	13.41	hrs

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

Today	21.25	Total	24.75	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

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	300	20.9	-	-
2	6"	60	300			
3	6"					

Materials Stock on Board @24:00

Item	Unit	Stock	Used	Received
Fresh Water	m3	247.7	55.6	69.1
Potable Water	m3	306.0	4.0	0.0
Drill Water	m3	1,694.0	6.0	0.0
Fuel	m3	6,522.2	44.7	0.0
Lube, Oil	Ltrs	134,200	0.0	0.0
Heli Fuel	Ltrs	0.0	0.0	0.0

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			9,375
Lime			9,320
Flowzan			25

Mud volume

PHG (m3)	376
Kill mud (m3)	60
SWG (m3)	97
Pre-Mix (m3)	60

Marine Information @24:00

Heave (m)	0.6
Pitch (deg)	0.3
Roll (deg)	0.1
Vessel Heading (deg)	250
Riser Tension (kN)	-
V.D. Load (ton)	15435
Max Draught (m)	9.0
Thruster (kW)	900

Heli Information @24:00

Flt. No.	Time Arrived	Time Departed	Passenger Are.	Passenger Dept.
1	09:40	09:53	12	14
2	13:50	14:00	6	8

Boat Information @24:00

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

HSQE and other information

Incident	Last Incident	No. LTI
LTI	11/14/19	
HUNS cards	45	

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	26.0	28.9	1013.7	4.4	246	5.6	1.4	200	6.8	2.2	63	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