

Chikyu DAILY MORNING REPORT

Mission No. : CK24-01

Exp. No. : 405

Report No. : 54

Site NameJTCT-01AHole NameC0019K

Lat.37°56.3461'NLong.143°54.8168'ESeabed Depth : 6,904.0 mBRTRT-MSL : 28.5 m

Report Date : 30/Oct/2024

Depth : @24:007,772.0 mBRT868.0 mbsfProgress : 19.5 mDrilling/Coring/Underreaming Hrs. : 24.00 hrs

Depth : @06:007,777.0 mBRT873.0 mbsfLAST CASING : x mbsf(mBRT)

Summary of Operation on 29-Oct : Cut SD-RCB #11, #12, #13, #14, #15

Present Operation @ 06:00 on 30-Oct : Cut SD-RCB #16

Time Breakdown (00:00 - 24:00 on 29-Oct)

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

From	To	Hrs	Code	Depth(mBRT)	Detail of Operation
0:00	0:30	0:30	CORE	7,752.5	Continue to sweep out SWG Sweep out 15m3 SWG w/650gpm x 13.2MPa. Observe pressure spike to MAX 14.8MPa when heaving and suspecting to touch to the bottom.
0:30	1:45	1:15	CORE	7,752.5	Drop C0019K #11K(SDRCB) inner barrel. Drop inner barrel. Pump 15m3 SWG. Pump to chase and confirm inner barrel landing by increasing pressure from 3.5 to 5.1MPa w/275gpm 33min after dropping. Increase pump rate to 650gpm x 20.2MPa and sweep out 15m3 SWG.
1:45	5:45	4:00	CORE	7,755.5	Cut C0019K #11K(SDRCB) core from 7,752.5 - 7,755.5mBRT (848.5 - 851.5mbsf) 7,752.5 - 7,755.5mBRT (848.5 - 851.5mbsf), MP 450gpm x 9.0-11.2MPa, HPS 90rpm x 0.9-14.0kNm, WOB 0-185kN, Auto ROP 40m/hr Observe no pressure increases. Reduce HPS speed to 30rpm and stop pumping after reaching 7,755.5mBRT. Wait 3min, stop rotation and take 70kN WOB for plugging at shoe. Load and run sinker bar. Recover inner barrel. Sweep out 15m3 SWG w/650gpm x 13.0MPa. Observe pressure spike to MAX 16.1MPa when heaving and suspecting to touch to the bottom.
5:45	6:45	1:00	CORE	7,755.5	Drop C0019K #12K(SDRCB) inner barrel. Drop inner barrel. Pump 15m3 SWG. Pump to chase and confirm inner barrel landing by increasing pressure from 3.2 to 5.0MPa w/275gpm 33min after dropping. Increase pump rate to 650gpm x 19.7MPa and sweep out 15m3 SWG.
6:45	10:30	3:45	CORE	7,758.5	Cut C0019K #12K(SDRCB) core from 7,755.5 - 7,758.5mBRT (851.5 - 854.5mbsf) 7,755.5 - 7,758.5mBRT (851.5 - 854.5mbsf), MP 450gpm x 9.0-10.7MPa, HPS 90rpm x 0.9-13.0kNm, WOB 0-100kN, Auto ROP 40m/hr Observe pressure increases gradually from 9.6MPa to 10.6MPa. Reduce HPS speed to 30rpm and stop pumping after reaching 7,758.5mBRT. Wait 3min, stop rotation and take 100kN WOB for plugging at shoe. Load and run sinker bar. Recover inner barrel. Sweep out 15m3 SWG w/650gpm x 14.1MPa. * Torque indication is observed from 7,755.0mBRT.
10:30	11:30	1:00	CORE	7,758.5	Drop C0019K #13K(SDRCB) inner barrel. Drop inner barrel. Pump 15m3 SWG. Pump to chase and confirm inner barrel landing by increasing pressure from 3.8 to 6.1MPa w/275gpm 33min after dropping. Increase pump rate to 650gpm x 22.0MPa and sweep out 15m3 SWG.
11:30	15:15	3:45	CORE	7,763.5	Cut C0019K #13K(SDRCB) core from 7,758.5 - 7,763.5mBRT (854.5 - 859.5mbsf) 7,758.5 - 7,763.5mBRT (854.5 - 859.5mbsf), MP 450gpm x 9.0-11.3MPa, HPS 90rpm x 0.9-12.0kNm, WOB 0-120kN, Auto ROP 40m/hr Observe pressure increases gradually from 10.2MPa to 11.6MPa. Reduce HPS speed to 30rpm and stop pumping after reaching 7,763.5mBRT. Wait 3min, stop rotation and take 70kN WOB for plugging at shoe. Load and run sinker bar. Recover inner barrel. Sweep out 15m3 SWG w/650gpm x 12.7MPa. * Torque indication is observed from 7,760.0mBRT.
15:15	16:30	1:15	CORE	7,763.5	Drop C0019K #14K(SDRCB) inner barrel. Drop inner barrel. Pump 15m3 SWG. Pump to chase and confirm inner barrel landing by increasing pressure from 3.8 to 6.1MPa w/275gpm 33min after dropping. Increase pump rate to 650gpm x 21.3MPa and sweep out 15m3 SWG.
16:30	20:30	4:00	CORE	7,766.0	Cut C0019K #14K(SDRCB) core from 7,763.5 - 7,766.0mBRT (859.5 - 862.0mbsf) 7,763.5 - 7,766.0mBRT (859.5 - 862.0mbsf), MP 450gpm x 9.9-11.5MPa, HPS 90rpm x 2.0-13.0kNm, WOB 0-100kN, Auto ROP 40m/hr Observe pressure increases to 11.6MPa from 11.0MPa at 7,765.6mBRT and stop coring at 7,766.0mBRT Reduce HPS speed to 30rpm and stop pumping after reaching 7,766.0mBRT. Wait 3min, stop rotation and take 70kN WOB for plugging at shoe. Load and run sinker bar. Recover inner barrel. Sweep out 15m3 SWG w/650gpm x 13.2MPa. Rack back stand and layout two single
20:30	21:45	1:15	CORE	7,766.0	Drop C0019K #15K(SDRCB) inner barrel. Drop inner barrel. Pump 15m3 SWG. Pump to chase and confirm inner barrel landing by increasing pressure from 3.4 to 5.6MPa w/275gpm 34min after dropping. Increase pump rate to 650gpm x 21.0MPa and sweep out 15m3 SWG.
21:45	24:00	2:15	CORE	7,772.0	Cut C0019K #15K(SDRCB) core from 7,766.0 - 7,772.0mBRT (862.0 - 868.0mbsf) 7,766.0 - 7,772.0mBRT (862.0 - 868.0mbsf), MP 450gpm x 9.9-11.5MPa, HPS 90rpm x 1.0-12.0kNm, WOB 0-70kN, Auto ROP 40m/hr Observe pressure increases to 11.3MPa from 10.9MPa at 7,771.7mBRT and stop coring at 7,772.0mBRT Reduce HPS speed to 30rpm and stop pumping after reaching 7,772.0mBRT. Wait 3min, stop rotation and take 70kN WOB for plugging at shoe. Load and run sinker bar. Recover inner barrel, ongoing
					(22:00) Akatsuki release to Shioyama port.

From	To	Hrs.	Code	Depth(mBRT)	Detail of Operation
0:00	1:30	1:30	CORE	7,752.5	Continue to sweep out SWG Sweep out 15m3 SWG w/650gpm x 13.2MPa
1:30	2:30	1:00	CORE	7,752.5	Drop C0019K #16K(SDRCB) inner barrel. Drop inner barrel. Pump 15m3 SWG. Pump to chase and confirm inner barrel landing by increasing pressure from 3.9 to 6.0MPa w/275gpm 33min after dropping. Increase pump rate to 650gpm x 21.3MPa and sweep out 15m3 SWG.
2:30	6:00	3:30	CORE	7,755.5	Cut C0019K #16K(SDRCB) core from 7,772.0 - 7,777.0mBRT (868.0 - 873.0mbsf) 7,772.0 - 7,777.0mBRT (868.0 - 873.0mbsf), MP 450gpm x 9.9-11.5MPa, HPS 90rpm x 1.0-11.0kNm, WOB 0-90kN, Auto ROP 40m/hr Observe no pressure increases. Reduce HPS speed to 30rpm and stop pumping after reaching 7,777.0mBRT. Wait 3min, stop rotation and take 70kN WOB for plugging at shoe. Load and run sinker bar. Recover inner barrel. Sweep out 15m3 SWG, ongoing. * Torque indication is observed from 7,772.5mBRT.

Bit Record @24:00

Bit No.	Size (in)	MFR	Type	IADC Code	S/No.	Nozzles	Depth (mBRT)	Meter-age	Hrs.	WOB (kN)	rpm	Total Rev. (krev)	ROP (m/hr)	Dull Condition							
							From	To		Min.	Max.	Min.	Max.	Inner	Outer	Dull	Loc.	B	G	O.D.	RP
3	8.5	NOV	CJPC713-A	-	F312253	7 x 16	6,927.5	7,757.5	830.0	26.53	0	120	0	100	100.96	31.3					
RR3a	8.5	NOV	CJPC713-A	-	F312253	7 x 16	6,904.0	7,772.0	868.0	22.98	0	185	0	90	165.65	37.8					

BHA Record @24:00

Bit No.	Size (in)	MFR	Type	IADC Code	S/No.	Nozzles	Depth (mBRT)	Meter-age	Hrs.	WOB (kN)	rpm	Total Rev. (krev)	ROP (m/hr)	Dull Condition							
							From	To		Min.	Max.	Min.	Max.	Inner	Outer	Dull	Loc.	B	G	O.D.	RP
6	8-1/2	Core bit	x Float valve sub	x Near bit sub	w/8-1/2" stabilizer	x Outer core barrel	x Landing sub	w/8-1/2" stabilizer	x Head sub	x XO#1 x 6-3/4" Coring Collar (5stds)	x XO#2 x 5" DP V-150 (23stds)	Re-Run for C0019K hole after bit is clear from seabed.									

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	5 min

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

No.	Liner Size	SPM	GPM	Press. (MPa)	Ann. Vel. (m/min)
1	6"	65	325		6"DC 5"DP
2	6"			22.0	182
4	6"	65	325		103

Materials Stock on Board @24:00

Item	Unit	Stock	Used	Received
Fresh Water	m3	217.0	64.6	60.6
Potable Water	m3	182.0	3.0	0.0
Drill Water	m3	931.0	7.1	24.1
Fuel	m3	4,692.5	41.2	0.0
Lube, Oil	Ltrs	118,900	0.0	0.0
Hell Fuel	Ltrs	0.0	0.0	0.0

Weather Information

Time	Weather	Temp. (degC)	Barometer	Wind	Wave	Current	Visibility
		Air : SW	(hPa)	Speed (m/s) : Dir. (deg) : Gust (m/s)	Height (m) : Dir. (deg) : Period (s)	Speed(knt) : Dir. (deg)	(km)
24:00	c	19.0 : 25.4	1018.8	12.7 : 140 : 13.1	2.0 : 90 : 6.2	0.5 : 164	22.0

Today's Schedule: Cut SD RCB Core.

Personnel @24:00

Name	Count
MarE3	7
MQJ Crew	101
MWJ	19
Scientist	30
Outreach	
JAMSTEC PR	1
Sub-contractor	
Oceanengineering	3
WL	
Expro	
NuStar	3
GE	
Total	164

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

Item	Received	Used	Stock
Barite			76,000
Tel-Gel		18,000	136,000
Caustic soda		250	6,025
Lime		240	6,160
Flowzan			25

Mud volume

Item	Count
PHG (m3)	244
Kill mud (m3)	48
SWG (m3)	81
Pre-Mix (m3)	30

Marine Information @24:00

Item	Count
Heave (m)	0.5
Pitch (deg)	0.4
Roll (deg)	0.2
Vessel Heading (deg)	120
Riser Tension (kN)	-
V.D. Load (ton)	12814
Max Draught (m)	9.0
Thruster (kW)	500

Heli Information @24:00

Flt.	Time	Passenger		
No.	Arrived	Departed	Are.	Dept.
1	09:45	09:55	12	11
2				

Boat Information @24:00

Boat	Status	Remarks
Akatsuki (Supply boat)	On the way to Shioyama port	
Ibuki (Guard boat)	Standby at Chikyu	

HSQE and other information

Incident	Last Incident	No. LTI
LTI	11/14/19	
HUNS cards	25	

Remarks

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

Daily

Cumulative

Reported by : N. Sakurai, T. Miyoshi

Approved by : I. Sawada