

Chikyu DAILY MORNING REPORT

Mission No. :CK24-01

Exp. No. :405

Report No. :87

Site NameJTCT-01A

Hole NameC0019P

Lat (UWTV)37°56.3294'N

Long.(UWTV)143°54.7792'E

Seabed Depth :6,920.0 mBRT

RT-MSL :28.5 m

Report Date :2/Dec/2024

Depth : @24:007,860.0 mBRT

Depth : @06:007,864.0 mBRT

Summary of Operation on1-Dec

Present Operation @ 06:00 on2-Dec

Time Breakdown ( 00:00 - 24:00 on1-Dec )

Progress :10.0 m

Drilling/Coring/Underreaming Hrs. :17.25 hrs

LAST CASING :x mbsf( mBRT)

Run SD-RCB assembly. Recover Center bit. Cut SD-RCB core.

Continue to cut SD-RCB core.

mBRT: meter below rotary table

mbsf: meter below sea floor

FromToHrsCodeDepth(mBRT)

0:006:456:45TRIP7,850.0

Run SD-RCB assembly to 6,830mBRT.

Install drain hose at 7,718mBRT. Meanwhile, Pump with 100gpm x 2.3MPa and rotate with 10rpm.

Start reamdown with 50gpm x 20rpm from 7,718mBRT but pressure increase to 17.0MPa.

Pump off but not decrease pressure. Suspect Bit nozzle plugged. Bleed off from stand pipe manifold.

Reciprocate strings 3m with rotate for applying surge pressure to plugged nozzle.

Pump with 50gpm and pressure is stable at 2.1MPa. Increase pump rate gradually to 250gpm and pressure is stable at 4.3MPa.

Reamdown with 250gpm x 20rpm from 7,718mBRT to 7,757mBRT and connect next stand.

Resume reamdown with 100gpm x 20rpm but pressure increase to 11.6MPa.

Once pump off, decrease pressure to zero. Increase pump rate gradually to 250gpm and pressure is stable at 4.6MPa.

Reamdown with 250gpm x 20rpm from 7,757mBRT to 7,796mBRT. Sweep out 10m3 of SWG with 500gpm x 15rpm at 7,796mBRT.

Reamdown with 250gpm x 10rpm from 7,796mBRT to 7,835mBRT.

Reamdown with 300gpm x 30rpm from 7,835mBRT to 7,850mBRT. No fill at Bottom.

Sweep 15m3 of SWG.

6:4510:153:30CORE7,850.0

Recover center bit.

Load and run sinker bar. Recovered center bit is no damage and no plugged nozzle.

10:1512:152:00CORE7,850.0

Circulate and bottoms up with 15m3 of SWG.

12:1514:152:00CORE7,850.0

Drop C0019P #1K(SDRCB) inner barrel.

Pump to chase and confirm inner barrel landing by increasing pressure from 1.9 to 2.9MPa w/200gpm 39min after dropping.

Check pressure(w/inner barrel): 200, 300, 400, 450, 500, 600gpm x 2.9, 5.3, 8.5, 10.9, 13.1, 17.5MPa

Pump 15m3 of SWG w/600gpm x 17.2MPa, 20rpm x 1.9kNm

14:1519:455:30CORE7,855.0

Cut C0019P #1K(SDRCB) core from 7,850.0 - 7,855.0mBRT (930.0 - 935.0mbsf)

7,850.0 - 7,855.0mBRT (930.0 - 935.0mbsf), MP 450gpm x 9.6-10.4MPa, HPS 90-100rpm x 2.0-18.0kNm, WOB 25-100kN, Actual ROP 9m/hr

After cut 2.5m, coring speed slow down and CMC start coming up. Adjust ROP from 20 to 15m/hr gradually.

Observe average torque increase at 7,854.0mBRT from 1.0 to 12kNm to 8.0-12.0kNm.

Reduce HPS and pump to 30rpm and 150gpm after reaching 7,855.0mBRT. Wait 3min, then stop rotation and take 30kN WOB 3times for plugging at shoe.

Load and run sinker bar. Recover inner barrel.

When catching inner barrel by CBRT, stop rotation and pump for 11min at 7,849mBRT.

Restart pump and rotation then observe high pressure and torque 100gpm x 17MPa and 20rpm x 19kNm

Continue to pump and rotate then remedy pressure and torque as 100gpm x 1.9MPa and 20rpm x 1.5kNm, suspect due to cuttings.

Unload sinker bar then sweep out 15m3 of SWG w/750gpm x 15.0MPa, 30-40rpm x 12.0kNm

19:4521:001:15CORE7,850.0

Drop C0019P #2K(SDRCB) inner barrel.

Pump to chase and confirm inner barrel landing by increasing pressure from 1.9 to 2.9MPa w/200gpm 35min after dropping.

Pump 10m3 of SWG w/600gpm x 17.3MPa, 20rpm x 2.1kNm

21:0024:003:00CORE7,860.0

Cut C0019P #2K(SDRCB) core from 7,855.0 - 7,860.0mBRT (935.0 - 940.0mbsf)

7,855.0 - 7,860.0mBRT (935.0 - 940.0mbsf), MP 450gpm x 9.5-10.4MPa, HPS 90rpm x 2.0-18.0kNm, WOB 60-110kN, Actual ROP 13m/hr

Reduce HPS and pump to 30rpm and 150gpm after reaching 7,860.0mBRT. Wait 3min, then stop rotation and take 30kN WOB 3times for plugging at shoe.

Load and run sinker bar. Recover inner barrel.

While recovering inner barrel, apply 150gpm x 1.8MPa and 20rpm x 1.2kNm for assisting cuttings out

When catching inner barrel by CBRT, stop rotation and pump for 6min at 7,838mBRT. Confirm no observe high pressure and torque.

(0:00-15:00) Advisory status due to wind speed >18m and vessel deviation >5m

FromToHrsCodeDepth(mBRT)

0:002:002:00CORE7,850.0

Continue to Unload sinker bar

Sweep out 15m3 SWG w/650gpm x 13.0MPa, 40rpm x 9.3kNm

2:003:151:15CORE7,850.0

Drop C0019P #3K(SDRCB) inner barrel.

Pump to chase and confirm inner barrel landing by increasing pressure from 2.9 to 4.8MPa w/275gpm 34min after dropping.

Pump 15m3 of SWG w/600gpm x 16.7MPa, 20rpm x 4.3kNm

3:156:002:45TRIP7,850.0

Cut C0019P #3K(SDRCB) core from 7,860.0 - 7,864.0mBRT (940.0 - 944.0mbsf)

7,860.0 - 7,864.0mBRT (940.0 - 944.0mbsf), MP 450gpm x 10.0-10.1MPa, HPS 80rpm x 0.4-13.1kNm, WOB 40-100kN, Auto ROP 0m/hr

Start parameter: 80spm x 40rpm. Not set Auto driller. Increase pump rate, rotation speed, and WOB, gradually.

Pressure increases 8.0MPa to 8.3MPa at 7,862.7mBRT.

Decrease ROP from Ave. 13.8m/h => Ave.5.0m/h from 7,863.0mBRT. Stop coring due to low ROP.

Load and run sinker bar. Recover inner barrel, ongoing.

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
RR3b	8.5	NOV	CJPC713-A1	-	F312253	7 x 15	7,850.0	7,860.0	10.0	0.93	30	110	90	100	170.69	10.7								

BHA Record @24:00

11	SD-RCB	8-1/2"Core bit x Float valve sub x Near bit sub (w/o stabilizer) x Outer core barrel x Landing sub (w/o stabilizer) x Head sub x XO#1 x 6-3/4"Coring Collar(6std) x XO#2 x 5"DP V-150 (23stds) x XO#3 x 5"DP S-140 (65stds) x 5-1/2"DP S-140 (22stds) x XO#4 x 5-1/2"DP S-150 (27stds) x XO#5 x 5-1/2"DP UD-165 (30stds) x XO#6 x 6-5/8"DP Z-140 (8stds) x 6-5/8"DP UD-165

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) 5 min

Mud Pumps : 14-P-220

No.	Liner Size	SPM	GPM	Press. (MPa)	Ann. Vel. (m/min)
1	6"			15.0	DC 5"DP
2	6"	65	325		182
4	6"	65	325		103

Materials Stock on Board @24:00

Item	Unit	Stock	Used	Received
Fresh Water	m3	174.9	99.2	51.5
Potable Water	m3	217.9	2.6	0.0
Drill Water	m3	721.7	5.7	36.0
Fuel	m3	3,285.6	50.7	0.0
Lube, Oil	Ltrs	100,200	0.0	0.0
Heli Fuel	Ltrs	0.0	0.0	0.0

Weather Information

Time	Weather	Temp. (degC)		Barometer (hPa)	Wind			Wave			Current		Visibility (km)
		Air	SW		Speed (m/s)	Dir. (deg)	Gust (m/s)	Height (m)	Dir. (deg)	Period (s)	Speed(knt)	Dir. (deg)	
24:00	bc	13.0	21.9	1017.2	11.2	288	13.5	2.7	0	6.5	0.4	266	22.0

Today's Schedule: Continue to coring.

Personnel @24:00

MarE3	6
MQJ Crew	101
MWJ	19
Scientist	27
Outreach officer	2
Grapher	2
INPEX trainee	2
Sub-contractor	
OCC	
WL	
Expro	
NuStar	3
GE	
Total	162

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

Item	Received	Used	Stock
Barite			100,000
Tel-Gel			118,000
Caustic soda			4,425
Lime			4,520
Flowzan			25

Mud volume

PHG (m3)	169
Kill mud (m3)	46
SWG(m3) 85se	65
SWG(m3) 58se	55
Pre-Mix (m3)	41

Marine Information @24:00

Heave (m)	0.9
Pitch (deg)	0.5
Roll (deg)	0.1
Vessel Heading (deg)	315
Riser Tension (kN)	-
V.D. Load (ton)	11470
Max Draught (m)	9.0
Thruster (kW)	400

Heli Information @24:00

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

Boat Information @24:00

Kaiyu (Supply boat)	Status	Chikyu
Ibuki (Guard boat) <td>Status</td> <td>Standby@Ishinomaki evacuation</td>	Status	Standby@Ishinomaki evacuation

HSQE and other information

Incident	Last Incident	No. LTI
LTI	11/14/19	
HUNS cards	40	

Remarks

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

Daily	
Cumulative	

Reported by : T. Ikawa / N. Sakurai / T. Miyoshi

Approved by : I.Sawada