

Chikyu DAILY MORNING REPORT

Mission No. :CK24-01Exp. No. :405Report No. :49

Site NameJTCT-01AHole NameC0019KLat.37°56.3461'NLong.143°54.8168'ESeabed Depth :6,904.0 mBRTRT-MSL :28.5 mReport Date :25/Oct/2024

Depth : @24:006,944.5 mBRT40.5 mbsfProgress :40.5 mDrilling/Coring/Underreaming Hrs. :3.75 hrs

Depth : @06:007,047.5 mBRT143.5 mbsfLAST CASING :x mbsf(mBRT)

Summary of Operation on24-Oct :Cont. POOH, Slip and cut, Rig services, Run UWTV, Move vessel, Seabed survey, Wash down, Recover UWTV.

Present Operation @ 06:00 on25-Oct :Cont. recover UWTV, Drill down to 7,047.5mBRT.

Time Breakdown ( 00:00 - 24:00 on24-Oct )

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

| From                                                                                                                                                              | To    | Hrs  | Code  | Depth(mBRT) | Detail of Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|------|-------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0:00                                                                                                                                                              | 2:00  | 2:00 | CORE  | 7,757.5     | POOH to 6,801mBRT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2:00                                                                                                                                                              | 8:15  | 6:15 | OTHER |             | Slip and cut drilling line.<br>Meanwhile, conduct UWTV pre-dive check                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 8:15                                                                                                                                                              | 10:00 | 1:45 | OTHER |             | Rig Services (Grease up HPS/Travelling Block/CMC/Dolly)<br><br>Meanwhile,<br>Open RGR door and skid back BOP cart to AFT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 10:00                                                                                                                                                             | 15:30 | 5:30 | UWTV  |             | Run UWTV to 6,800m.<br>Meanwhile,<br>Check pressure w/o center bit: 200 - 300 - 400 - 500 - 600 - 650gpm x 1.5 - 2.9 - 4.7 - 7.1 - 10.1 - 11.9MPa<br>2MPa of pumping pressure is lower than when check pressure before spudding in C0019J hole.<br>Replace soft sling with cable gripper at HPS service loops.<br>Drop center bit and check pressure: 200 - 300 - 400 - 500 - 600 - 650gpm x 2.0 - 4.0 - 6.5 - 9.4 - 13.2 - 15.0MPa<br>4MPa of pumping pressure is lower than when check pressure before spudding in C0019J hole. : Suspect inside DP and some rust is cleaned.                                                                        |
| 15:30                                                                                                                                                             | 16:30 | 1:00 | OTHER | 6,904.0     | Seabed survey<br>Move vessel to C0019K hole (37°56'34.61"N, 143°54'81.68"E). * 28deg/20m away from C0019A hole.<br>Lower and tag seabed at 6,904.0mBRT. Confirm the hole location with Co-Chief scientist.<br>Lay down 1 single for adjusting pipe tally before washing down.                                                                                                                                                                                                                                                                                                                                                                          |
| 16:30                                                                                                                                                             | 20:15 | 3:45 | W&R   | 6,944.5     | Wash down to 6,944.5mBRT (40.5mbsf)<br>Reciprocate 3m every 3m wash down from 6,916.0mBRT (12.0mbsf).<br>6,904.0 - 6908.0mBRT (0.0 - 4.0mbsf) Pump 150gpm x 1.5-2.0Pa, WOB 0-30kN.<br>6,908.0 - 6,909.0mBRT (4.0 - 5.0mbsf) Pump 200gpm x 2.0-2.5MPa, WOB 0-35kN.<br>6,909.0 - 6,909.5mBRT (5.0 - 5.5mbsf) Pump 300gpm x 3.8-4.1MPa, WOB 0-45kN.<br>6,909.5 - 6,921.0mBRT (5.5 - 17.0mbsf) Pump 400gpm x 5.8-6.8MPa, WOB 0-30kN.<br>6,921.0 - 6,944.5mBRT (17.0 - 40.5mbsf) Pump 450gpm x 7.8-8.2MPa, WOB 0-30kN.<br>Sweep out 5m3 SWG at 6,934.5mBRT and 6,944.5<br>*No progress for 15-30min at 6,909.2mBRT, 6,921.0mBRT and suspect hard formation. |
| 20:15                                                                                                                                                             | 24:00 | 3:45 | UWTV  | 6,944.5     | Recover UWTV to surface, ongoing.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| (00:00-03:30) Advisory status due to over 18m/s wind speed.<br>(04:00-10:15) Advisory status due to maintenance work for FO injection valve at 2P main generator. |       |      |       |             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

| From | To   | Hrs. | Code | Depth(mBRT) | Detail of Operation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------|------|------|------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0:00 | 0:30 | 0:30 | UWTV | 6,944.5     | Recover UWTV to surface.<br>Observe 4-way sling twisted and remove slings from UWTV frame.<br>Skid back working cart and skid forward RGR to FWD.<br>Set RGR position at 0.4m offset and close RGR door w/installing retainer plate.                                                                                                                                                                                                                                                                          |
| 0:30 | 6:00 | 5:30 | DRL  | 7,047.5     | Drill down 8-1/2"hole from 6,944.5mBRT to 7,047.5mBRT (40.5 ~ 143.5mbsf), ongoing.<br>MPHPSWOBROP set<br>6,944.5 - 6,956.0mBRT (40.5 - 52.0mbsf) 400gpm x 6.5-7.0MPa 10rpm x 0.5-3.5kNm 0-30kN 50m/hr<br>6,956.0 - 7,011.5mBRT (52.0 - 107.5mbsf) 400gpm x 6.5-7.0MPa 20rpm x 0.1-3.5kNm 0-35kN 40m/hr<br>7,011.5 - 7,047.5mBRT (107.5 - 143.5mbsf) 400gpm x 6.5-7.0MPa 30rpm x 0.1-4.5kNm 0-40kN 40m/hr<br>Reciprocate 5m every 5m advance from 6,949.0mBRT to 7,007.0mBRT.<br>Sweep out 5m3 SWG every stand |

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-A1 | -         | F312253 | 7 x 16  | 6,927.5      | 7,757.5 | 830.0     | 26.53 | 0        | 120  | 0    | 100  | 100.96            | 31.3       | Re-Run for C0019K hole after bit is clear from seabed. |       |      |      |   |   |      |    |
| RR3a    | 8.5       | NOV | CJPC713-A1 | -         | F312253 | 7 x 16  | 6,904.0      | 6,944.5 | 40.5      | 0.00  | 0        | 45   | 0    | 0    | 0.00              | 0.0        |                                                        |       |      |      |   |   |      |    |

BHA Record @24:00

| No. | SDRCB | 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) x XO#3 x 5"DP S-140 (66stds) x 5-1/2"DP S-140 (22stds) x XO#4 x 5-1/2"DP S-150 (25stds) x XO#5 x 5-1/2"DP UD-165 (30stds) x XO#6 x 6-5/8"DP Z-140 (13stds) x 6-5/8"DP UD-165 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-----|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|     |       | 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) x XO#3 x 5"DP S-140 (66stds) x 5-1/2"DP S-140 (22stds) x XO#4 x 5-1/2"DP S-150 (25stds) x XO#5 x 5-1/2"DP UD-165 (30stds) x XO#6 x 6-5/8"DP Z-140 (13stds) x 6-5/8"DP UD-165 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5   | SDRCB |                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6   | SDRCB |                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

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 |     | K+ | n | K | LGS | FIT 20/40 (mm) |      |
|----------|------|--------------|----|-----|----|----|------|--------------------|-----|------|----|----|-----|------|-----|-------|-----|------|-----|----|---|---|-----|----------------|------|
|          |      |              |    |     |    |    |      |                    |     |      |    |    |     |      |     |       |     | In   | Out |    |   |   |     | 0 min          | 5min |
|          |      |              |    |     |    |    |      |                    |     |      |    |    |     |      |     |       |     |      |     |    |   |   |     |                |      |

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

| No. | Liner Size | SPM | GPM | Press. (MPa) | Ann. Vel. (m/min) |
|-----|------------|-----|-----|--------------|-------------------|
| 1   | 6"         | 45  | 225 | 8.2          | 6"DC 5"DP         |
| 2   | 6"         |     |     |              |                   |
| 4   | 6"         | 45  | 225 |              | 126 71            |

Materials Stock on Board @24:00

| Item          | Unit | Stock   | Used | Received |
|---------------|------|---------|------|----------|
| Fresh Water   | m3   | 302.0   | 70.7 | 88.7     |
| Potable Water | m3   | 200.0   | 3.0  | 0.0      |
| Drill Water   | m3   | 1,092.0 | 0.0  | 0.0      |
| Fuel          | m3   | 4,900.7 | 43.1 | 0.0      |
| Lube, Oil     | Ltrs | 119,500 | 0.0  | 0.0      |
| Heil 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) | Height (m) | Dir. (deg) | Period (s) | Speed(knt) |                 | Dir. (deg) |      |
| 24:00 | o       | 22.0         | 24.6 | 1019.0          | 3.7         | 340        | 4.8        | 1.5        | 340        | 6.3        | 0.7             | 25         | 22.0 |

Today's Schedule: Continue to drill down to coring depth.

Personnel @24:00

| Name             | Count |
|------------------|-------|
| MarE3            | 5     |
| MQJ Crew         | 101   |
| MWJ              | 20    |
| Scientist        | 25    |
| Outreach         |       |
| JAMSTEC PR       |       |
| Sub-contractor   |       |
| Oceanengineering | 2     |
| WL               |       |
| Expro            |       |
| NuStar           | 3     |
| GE               |       |
| Total            | 156   |

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

| Item         | Received | Used | Stock   |
|--------------|----------|------|---------|
| Barite       |          |      | 76,000  |
| Tel-Gel      |          |      | 172,000 |
| Caustic soda |          | 250  | 7,025   |
| Lime         |          | 240  | 7,120   |
| Flowzan      |          |      | 25      |

Mud volume

| Item          | Volume |
|---------------|--------|
| PHG (m3)      | 195    |
| Kill mud (m3) | 48     |
| SWG (m3)      | 102    |
| Pre-Mix (m3)  | 60     |

Marine Information @24:00

| Item                 | Value |
|----------------------|-------|
| Heave (m)            | 0.4   |
| Pitch (deg)          | 0.2   |
| Roll (deg)           | 0.1   |
| Vessel Heading (deg) | 270   |
| Riser Tension (kN)   | -     |
| V.D. Load (ton)      | 13127 |
| Max Draught (m)      | 9.0   |
| Thruster (kW)        | 400   |

Heli Information @24:00

| Flt. No. | Time    |          | Passenger |       |
|----------|---------|----------|-----------|-------|
|          | Arrived | Departed | Are.      | Dept. |
| 1        | 09:32   | 09:47    | 14        | 14    |
| 2        |         |          |           |       |

Boat Information @24:00

| Boat                   | Status | Standby at Chikyu |
|------------------------|--------|-------------------|
| Akatsuki (Supply boat) | Status | Standby at Chikyu |
| Ibuki (Guard boat)     | Status | Standby at Chikyu |

HSQE and other information

| Incident   | Last Incident | No. LTI |
|------------|---------------|---------|
| LTI        | 11/14/19      |         |
| HUNS cards | 27            |         |

Remarks

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

| Daily                               | Cumulative |
|-------------------------------------|------------|
| Reported by : T.Miyoshi, T.Yokoyama |            |
| Approved by : I.Sawada              |            |