

Chikyu DAILY MORNING REPORT

Mission No. :CK24-01Exp. No. :405Report No. :9

Site NameJTCT-01AHole NameC0019F

Lat. Long. Seabed Depth :6,924.0 mBRTRT-MSL :28.5 m

Depth :@24:00 mBRT mbsfProgress :0.0 mDrilling/Coring/Underreaming Hrs. :0.00 hrs

Depth :@06:00 mBRT mbsfLAST CASING :x mbsf(mBRT)

Summary of Operation on14-Sep: MU and Run 8-1/2"LWD assembly, Conduct LWD Shallow Hole Test, Conduct circulation pressure check

Present Operation @ 06:00 on15-Sep: Run 8-1/2"LWD assembly, Dive UWTV, Conduct seabed survey

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

| From  | To    | Hrs  | Code  | Depth(mBRT) | Detail of Operation                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------|-------|------|-------|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0:00  | 5:15  | 5:15 | TRIP  |             | MU and Run 8-1/2"LWD assembly to 138mBRT.<br>Motor gap: Pick up 4.0mm, Take weight 4.1mm, Motor stabilizer: 8-3/8in<br>MicroScope's stabilizer :8-3/8in, SonicScope's stabilizer:Lower 8-1/8", Upper 8-1/4"<br>Paint white mark at 50m (Single band) and 100m (Double band) from the bottom.<br>(04:00)Start drifting with 0.7knot from 10NM South Well center, due to string vibration                                 |
| 5:15  | 5:45  | 0:30 | LOG   |             | Conduct LWD shallow test at 138mBRT<br>450gpm x 6.4MPa: LWD function OK                                                                                                                                                                                                                                                                                                                                                 |
| 5:45  | 12:45 | 7:00 | TRIP  |             | Resume to run 8-1/2"LWD assembly to 3,009mBRT.<br>Fill up @708mBRT, 1,280mBRT,1,839mBRT, 2,409mBRT, 3,009mBRT.<br>(10:00)Stop drifting due to string vibration decreasing.<br>(11:30)Start drifting with 0.5knot to go ahead JFAST observatory.                                                                                                                                                                         |
| 12:45 | 13:15 | 0:30 | LOG   |             | Conduct LWD signal test at 3,009mBRT<br>400gpm x 7.7MPa (NG), 500gpm x 11.6MPa (OK), 600gpm x 16.0MPa (OK).<br>Observe pressure increases to 3.7MPa initially while pumping with 200gpm and drops to 2.5MPa.                                                                                                                                                                                                            |
| 13:15 | 20:15 | 7:00 | TRIP  |             | Resume to run 8-1/2"LWD assembly to 6,004.5mBRT.<br>Fill up @3,566mBRT 4,147mBRT, 4,710mBRT, 5,285.5mBRT, 5,850mBRT.<br>(14:15-14:30) Set Long Slip Lifter.<br>(19:30) Stop drifting at 1.5NM South from JFAST observatory.<br><br>Meanwhile,<br>(14:15-14:30) Conduct UWTV Pre-Dive Check.                                                                                                                             |
| 20:15 | 21:00 | 0:45 | LOG   |             | Conduct LWD signal test at 6,004.5mBRT<br>400gpm x 10.0MPa (NG), 425gpm x 11.3MPa (NG), 450gpm x 12.4MPa (OK), 500gpm x 15.5MPa (OK).<br>*Confirmed LWD flow range: 450 - 600gpm<br>Observe abnormal pressure increases to 11.7MPa initially while pumping with 125gpm and drops to 2.7MPa.                                                                                                                             |
| 21:00 | 22:45 | 1:45 | TRIP  |             | Resume to run 8-1/2"LWD assembly to 6,542.5mBRT.                                                                                                                                                                                                                                                                                                                                                                        |
| 22:45 | 23:15 | 0:30 | OTHER |             | Conduct circulation pressure check at 6,542.5mBRT.<br>Start pumping with 250gpm and observe pressure increases to 5.7MPa, and drops to 4.8MPa. (No abnormal pressure)<br>After bleeding off pressure, restart pumping with 250gpm and observe no pressure spike<br>Making up 1 stand and start pumping with 250gpm again, and observe no significant pressure spike (Pressure increases to 5.9MPa and drops to 4.9MPa). |
| 23:15 | 24:00 | 0:45 | TRIP  |             | Resume to run 8-1/2"LWD assembly to 6,772.5mBRT, ongoing.                                                                                                                                                                                                                                                                                                                                                               |

Time Breakdown (00:00 - 06:00 on15-Sep) \* The data on 00:00 - 06:00 is unofficial.

| From | To   | Hrs. | Code     | Depth(mBRT) | Detail of Operation                                                                                                                                                                                                                                     |
|------|------|------|----------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0:00 | 1:00 | 1:00 | TRIP     |             | Continue to run 8-1/2"LWD assembly to 6,851mBRT<br>(00:30-01:00)Check Circulating pressure 100, 200, 300, 400, 500, 600gpm x 1.7, 3.5, 6.2, 10.2, 15.2, 20.9MPa.                                                                                        |
| 1:00 | 4:00 | 3:00 | OTHER    |             | Dive UWTV to 6,800m<br>(01:00-02:45)Pump w/200gpm x 3.8MPa<br>(01:00)Start drifting with 0.5knot from 1.5NM<br>(3:20)Change drifting speed from 0.5knot to 0.7, 0.9knot.<br>(03:45)Observe offset between vessel and UWTV gets 500m from UWTV's beacon. |
| 4:00 | 5:45 | 1:45 | OTHER(N) |             | Stop vessel and wait for UWTV catching up on vssel<br>Lay out 1std & 1jt of 6-5/8"DP(Z-140), & pick up another 1std and 1jt of same due to possibility of overstress on top of string by large offset of string while drifting.                         |
| 5:45 | 6:00 | 0:15 | OTHER    |             | Conduct seabed survey<br>Lower LWD assembly and UWTV to find JFAST Observatory's wellhead, on going.                                                                                                                                                    |

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 |
| 2       | 8.5       | Smith | BXZ716M | -         | QG1125 | 7 x 12  |              |    |           |      |          |      |      |      |                   |            |                |       |      |      |   |   |      |    |

BHA Record @24:00

|   |           |                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                |  |                                   |  |     |  |
|---|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--------------------------------|--|-----------------------------------|--|-----|--|
| 2 | 8-1/2"LWD | 8-1/2" Bit x 6-1/2" Mud motor x Float sub w/float x MicroScope x TeleScope x SonicScope x 6-3/4" drilling DC(1jt) 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(25stds) x XO#4 x 5-1/2" DP UD-165 (29stds) x XO#5 x 6-5/8" DP Z-140 (1 x 6-5/8" DP UD-165 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                |  | Hook Wt. (knt) @24:006,772.5 mBRT |  |     |  |
|   |           |                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                |  | Hook Load3,260                    |  |     |  |
|   |           |                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | BHA146                         |  |                                   |  |     |  |
|   |           |                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Below Jar120                   |  |                                   |  |     |  |
|   |           |                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | HPS & Traveling block680       |  |                                   |  |     |  |
|   |           |                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | CSG/TBG                        |  |                                   |  |     |  |
|   |           |                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Jar Rotating Time @24:00 S/N:  |  |                                   |  |     |  |
|   |           |                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Today                          |  | Total                             |  | hrs |  |
|   |           |                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Motor Pumping time @24:00 S/N: |  |                                   |  |     |  |
|   |           |                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Today                          |  | Total                             |  | 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 |     | 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"         | 50  | 250 | 2.2          | 6"DC 5"DP         |
| 2   | 6"         |     |     |              | -                 |
| 3   | 6"         |     |     |              | -                 |

Materials Stock on Board @24:00

| Item          | Unit | Stock   | Used | Received |
|---------------|------|---------|------|----------|
| Fresh Water   | m3   | 211.0   | 53.9 | 39.5     |
| Potable Water | m3   | 316.2   | 2.4  | 0.0      |
| Drill Water   | m3   | 1,700.0 | 0.0  | 0.0      |
| Fuel          | m3   | 6,709.2 | 42.9 | 0.0      |
| Lube, Oil     | Ltrs | 136,400 | 0.0  | 0.0      |
| Helil Fuel    | Ltrs | 0.0     | 0.0  | 0.0      |
|               |      |         |      |          |
|               |      |         |      |          |

Personnel @24:00

|                |     |
|----------------|-----|
| MarE3          | 5   |
| MQJ Crew       | 101 |
| MWJ            | 7   |
| Scientist      | 27  |
| LSS            | 2   |
| Outreach       |     |
| JAMSTEC        |     |
|                |     |
| Sub-contractor |     |
| SLB-WL         |     |
| SLB-LWD        | 4   |
| Expro          |     |
| NuStar         | 3   |
| Total          | 149 |

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)      | 122 |
| Pre-Mix (m3)  | 60  |

Marine Information @24:00

|                      |       |
|----------------------|-------|
| Heave (m)            | 0.5   |
| Pitch (deg)          | 0.2   |
| Roll (deg)           | 0.1   |
| Vessel Heading (deg) | 220   |
| Riser Tension (kN)   | -     |
| V.D. Load (ton)      | 15582 |
| Max Draught (m)      | 9.0   |
| Thruster (kW)        | 1700  |

Heli Information @24:00

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

Boat Information @24:00

|                        |        |                      |
|------------------------|--------|----------------------|
| Akatsuki (Supply boat) | Status | -                    |
| Ibuki (Guard boat)     | Status | Survey at JFAST well |

HSQE and other information

| Incident   | Last Incident | No. LTI |
|------------|---------------|---------|
| LTI        | 11/14/19      |         |
| HUNS cards | 41            |         |

Remarks

|  |
|--|
|  |
|--|

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 | c       | 27.0         | 28.6 | 1011.0          | 10.6        | 228        | 11.7       | 1.5        | 70         | 5.3        | 2.2        | 41         | 22.0            |

Today's Schedule: Conduct seabed survey, Spud in LWD hole, Recover UWTV, Drill 8-1/2"LWD hole.

Reported by : T.Yokoyama, Y.Oishi  
Approved by : T.Saruhashi