# *Chikyu* DAILY MORNING REPORT

**Mission No. :** CK12-02 **Exp. No. :** Exp 343 **Report No. :** 48

**Site Name :** JFAST3 **Hole Name :** C0019E **Lat.** 37°56.3343'N **Long.** 143°54.8084'E **Report Date :** 19/May/2012

Depth : @24:00 **7,637.0** mBRT **719.0** mbsf Progress : **23.0** m Seabed Depth : **6,918.00** mBRT RT-MSL : **28.5** m

Depth : @06:00 **7,644.0** mBRT **726.0** mbsf Drilling/Coring/Jetting Hrs. : **2.50** hrs LAST CASING : x mbsf

Summary of Operation on **18-May** : Cut RCB core #5,#6,tagging w/centerbit, #7

Present Operation to 06:00 on **19-May** : Cut RCB core #8,#9

mBRT: meter below rotary table

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

| From | To | Hrs | Code | Detail of Operation |
|---|---|---|---|---|
| 0:00 | 2:30 | 2:30 | Core | Continue to recover inner barrel w / 60m/min. 10spm x 10rpm. |
| 2:30 | 3:15 | 0:45 | Core | Recover inner barrel. Check core. Meanwhile uninstall sinkerbar, connect HPS and sweep 10m3 w/180spm 19Mpa. |
| 3:15 | 4:00 | 0:45 | Core | Drop inner barrel, chase Meanwhile, Pump 180spm x 18.7MPa, HPS 20rpm. |
| 4:00 | 5:00 | 1:00 | Core | Cut #5 core from 7,614.0m to 7,622mBRT. Coring parameter, pump 50spm w/6.0Mpa, rotate 80RPM w/0-10kNm, WOB 50-70kN. |
| 5:00 | 8:00 | 3:00 | Core | Circ w/40spm, stop pump and install sinkerbar, recover inner barrel w/10spm pumping and rotate 10rpm. |
| 8:00 | 9:30 | 1:30 | Core | Recover core. Uninstall sinkerbar. Connect HPS and sweep out 10m3 of hi-vis w/180spm pumping. |
| | | | | Drop inner barrel and attempt to make connection. |
| 9:30 | 10:45 | 1:15 | Other(N) | While EBT connection, Dual elevator couldn't open. Trouble shooting the upper DES on EBT position. |
| | | | | Open by manpower Lower the DES and Back to another one. |
| 10:45 | 11:00 | 0:15 | Other | make connection and pump w/50-120spm, make sure each pump pressure. |
| 11:00 | 12:00 | 1:00 | Core | Cut #6 core from 7,622.0m to 7,631.0mBRT. Coring parameter, pump 80spm w/5.5-6.0Mpa, rotate 100-120RPM w/0-10kNm, WOB 60-80kN. |
| 12:00 | 12:30 | 0:30 | Other | Circulation bottom up 120spm x 13.3Mpa, 20rpm |
| 12:30 | 15:00 | 2:30 | Other | Install sinker bar and lower same. Unset inner barrel with 89kN cable tension. Recover inner barrel |
| | | | | While winding up cable w/10spm and 2-10rpm, observe slight pack off / take weight at 7,625mBRT |
| 15:00 | 15:30 | 0:30 | Other | Drop center bit and chase with 50spm x 1.6Mpa. Observe landing indication after 37min (pressure increase to 3.0Mpa) |
| | | | | Check pressure 90spm x 7.0Mpa, 120spm x 11.3Mpa |
| 15:30 | 16:15 | 0:45 | Circ | Sweep out 20m3 Hi-vis with 160spm x 19.5Mpa, Ream down to bottom with 90rpm |
| 16:15 | 18:30 | 2:15 | Other | Install sinker bar and recover center bit |
| | | | | Find very fine cuttings (same as No.2/No.3 core) inside center bit assembly. (about 2m) |
| 18:45 | 20:15 | 1:30 | Circ | Sweep out 10m3 Hi-vis 2 times. 180spm x 19.4Mpa |
| 20:15 | 21:15 | 1:00 | Other | Drop inner barrel and chase with 50spm x 1.5Mpa. Observe landing indication after 33min(pressure increase to 2.9Mpa) |
| | | | | Check pressure 50-60-70-80-90-100-110-120spm x 2.6-3.7-5.1-6.5-8.2-9.9-11.8-14.2Mpa |
| 21:15 | 21:45 | 0:30 | Core | Cut #7 core from 7,631.0m to 7637.0mBRT. 80spm x 6.2Mpa, HPS 80-120RPM, 3-9kNm, WOB 60-80kN. |
| 21:45 | 22:15 | 0:30 | Circ | Circulate 2 x bottom up 120spm x 13.7Mpa |
| 22:15 | 24:00 | 1:45 | Other | Install sinker bar and recover inner barrel. |

| No. | System | On Deck | from mBRT | to mBRT | Advance m | Recovery m | Recovery % | Lithology | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 5 | RCB | 7:50 | 7,614.0 | 7,622.0 | 8.0 | 4.17 | 52.1% | Dark gray firm claystone | 80spm / 80rpm / 60kN→80spm/ 120rpm / 80kN |
| 6 | RCB | 14:28 | 7,622.0 | 7,631.0 | 9.0 | 2.12 | 23.6% | Dark gray firm claystone | pump 80spm w/5.5-6.0Mpa, rotate 100-120RPM w/0-10kNm, WOB 60-80kN. |
| 7 | RCB | 0:00 | 7,631.0 | 7,637.0 | 6.0 | 2.78 | 46.3% | Gryshi olive green firm claystone | 80spm x 6.2Mpa, HPS 80-120RPM, 3-9kNm, WOB 60-80kN. |

Time Breakdown (00:00 - 06:00 on **19-May** ) * The data on 00:00 - 06:00 is unofficial.

| From | To | Hrs | Code | Detail of Operation |
|---|---|---|---|---|
| | | | | 8 RCB 4:08 7,637.0 7,642.5 5.5 3.9 70.9% Grayish black fragile firm claystone — 80spm / 80-90-100-120rpm / 70-80kN |
| 0:00 | 0:15 | 0:15 | core | Continue to recover inner barrel. |
| 0:15 | 1:45 | 1:30 | core | Sweep out 20m3 of SWG mud w/200spm @ 1m off bottom. |
| 1:45 | 2:00 | 0:15 | core | Cut #8 core from 7,637.0m to 7642.5mBRT. 80spm x 6.2Mpa, HPS 80-120RPM, 3-10kNm, WOB 60-80kN. |
| 2:00 | 4:15 | 2:15 | core | Install sinker bar and recover #8 innerbarrel.. |
| 4:15 | 5:15 | 1:00 | core | Uninstall sinkerbar, Sweep out 30m3 of SWG mud. Meanwhile recover #8 core. |
| 5:15 | 5:45 | 0:30 | core | Drop inner barrel and chase w/sea water. |
| 5:45 | 6:00 | 0:15 | core | Cut #9 core from 7,642.5m to 7,644mBRT. pump 80-100 spm w/80-130-6.0Mpa, rotate 80-130RPM w/0-10kNm, WOB 60-100kN. |

Bit Record

| 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) | Dull Condition Inner | Outer | Dull | Loc. | B | G | O.D. | RP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 10-5/8 | HCC | BHC410C | | 7138607 | 10 x 13/32 | 6918.0 | 7,638.0 | 720.0 | 38.15 | 0 | 100 | 80 | 120 | 205.0 | | | | | | | | |

BHA Record

| | |
|---|---|
| 3 | Core bit x RCB core barrel (w/Long bit sub and 10-5/8" stab) x 10-5/8"Coring stab x 8-1/2" Core DC (2jts) x 10-5/8" Coring stab x 8-1/2" Core DC (9jts) x |
| | XO x 5.68" HWDP (12jts) x XO x 5" S140 pre. (68stds) x 5-1/2" S140 pre. (36stds) x XO x 5-1/2" S150 pre. (53stds) x 5-1/2"S150 New (18stds) x 6-5/8" Z-140 New |

Hook Wt. (kN) @ 7,638 mBRT

| | |
|---|---|
| Total Hook Weight | 4,100 |
| Pick Up Weight | |
| Slack Off Weight | |
| HPS & Traveling block | 750 |

Mud Properties

| Mud Type | Time | Depth (mBRT) | MW | VIS | PV | YV | Gel St. | | WL | Cake | pH | Pf | Cl- | K+ | LGS | PPG | MBC | n | K | Temp In | Temp Out |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sea Water Gel | | Pit | 1.04 | 110 | 12 | 58 | 22 | 23 | | | 11.5 | | | | | | | 0.23 | 16.87 | 18 | |
| Sea Water Gel | | Pit | 1.04 | 136 | 11 | 72 | 23 | 26 | | | 11.7 | | | | | | | 0.18 | 27.10 | 19 | |

Mud Pumps : 14-P-220 @ 7638.0 mBRT 5.00 gallon/stroke @97%

| No. | Liner Size | SPM | GPM | Press. Coring (MPa) | Ann. Vel. (m/min) | |
|---|---|---|---|---|---|---|
| 1 | 6 | 80 | 400 | 6.2 | | |
| 2 | 6 | | | | | |
| 3 | 6 | | | | | |

Geologic Information

| From | To | Litho logy |
|---|---|---|
| | | |

Materials Stock on Board @24:00

| Item | Unit | Received | Used | Stock |
|---|---|---|---|---|
| Fresh Water | m3 | 87.9 | 90.8 | 217.5 |
| Potable Water | m3 | 0.0 | 6.9 | 108.3 |
| Drill Water | m3 | 0.0 | 4.8 | 626.1 |
| Fuel | m3 | 0.0 | 42.9 | 2,090.1 |
| Lube, Oil | Ltrs | 0.0 | 400 | 93,500 |
| Heli Fuel | Ltrs | 0.0 | 0.0 | 800.0 |

Boat Information@24:00

| Boat Name | Status | Time Departed | Time Arrived |
|---|---|---|---|
| No.18 Kaiko-Maru | Chikyu | | |

Personnel @24:00

| | |
|---|---|
| CDEX | 11 |
| MQJ Crew | 96 |
| MQJ (Other) | 0 |
| MWJ | 20 |
| Scientist | 27 |
| | |
| Telnite | 1 |
| Sch-LWD | 0 |
| Sch-WL | 1 |
| Magnum | 1 |
| Franks | 0 |
| WWT | 0 |
| OCC | 0 |
| NOV | 1 |
| Kaiyodenshi | 0 |
| Core-IRM | 0 |
| Other | 3 |
| | |
| | |
| | |
| Total | 161 |

| Mud Volume (m3) | |
|---|---|
| Pre-Hyd. | 339 |
| Kill mud (1.30sg) | 61 |
| Premix SW | 43 |
| Sea Water Gel | 135 |

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

| Item | Received | Used | Stock |
|---|---|---|---|
| Barite (Bulk) | 0 | 0 | 557,500 |
| Bentonite (by S.Lanka) | 0 | 0 | 0 |
| Kunigel-VO (Bulk) | 0 | 0 | 120,700 |
| NaOH | 0 | 250 | 6,750 |
| Lime | 0 | 160 | 6,680 |
| XCD-Polymer | 0 | 0 | 100 |
| Rester | 0 | 0 | 3,000 |
| Baracor-100 (gal) | 0 | 0 | 110 |
| Telnite OS-5 | 0 | 0 | 120 |
| | 0 | 0 | 0 |
| | 0 | 0 | 0 |
| | 0 | 0 | 0 |
| | 0 | 0 | 0 |
| | 0 | 0 | 0 |
| | 0 | 0 | 0 |
| | 0 | 0 | 0 |

Marine Information @24:00

| | |
|---|---|
| Heave (m) | 0.3 |
| Pitch (deg) | 2.1 |
| Roll (deg) | 0.1 |
| Vessel Heading (deg) | 330 |
| Riser Tension (ton) | - |
| V.D. Load (Moon) | 10443.5 |
| Max Draught (m) | 9.0 |
| Thruster (kW) | 570 |

Helicopter Information

| Flt. No. | Time Arrived | Time Departed | Passenger Are. | Passenger Dept. |
|---|---|---|---|---|
| 1 | Cancelled due to foggy weather | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |

Safety (HSE) and other information

| Incident | Last Incident | No. LTA |
|---|---|---|
| LTA | | |
| HUNS cards | 17 | |

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 | o | 12.0 | 16.2 | 1010.6 | 9.9 | 322.0 | 12.7 | 1.9 | 350 | 6.2 | 1.1 | 331 | 9 |

Today's Schedule : Continue to cut RCB core / Drill down