

Chikyu DAILY MORNING REPORT

Mission No. : CK13-04

Exp. No. : Exp 348

Report No. :

70

Site Name : C0002 Hole Name : C0002N Lat. 33° 18.0607'N Long. 136° 38.2092'E Report Date : 22/Nov/2013  
 Depth : @24:00 4287.5 mBRT 2330.0 mbsf Progress : \_\_\_\_\_ m Sealed Depth : 1,967.50 mBRT RT.MSL : \_\_\_\_\_ m  
 Depth : @06:00 4287.5 mBRT 2330.0 mbsf Drilling/Coring/Setting Hrs : \_\_\_\_\_ hrs LAST CASING : 20" x 860.30 mbsf ( 2,827.8 mBRT)  
 Summary of Operation on 21-Nov : Lay out 25ft 13-3/8"CSG. Make up PADPRT assembly. RIH 13-3/8"CSG.  
 Present Operation @ 06:00 on 22-Nov : Picking up cement stand.  
 Time Breakdown ( 00:00 - 24:00 on 21-Nov ) mBRT: meter below rotary table  
 mbsf: meter below sea floor

| From   | To    | Hrs  | Code     | Detail of Operation  |
|--|-------|------|----------|--|
| 0:00   | 2:30  | 2:30 | CSG(N)   | Continue rigging up 13-3/8" CSG handling tools.  |
| 2:30   | 6:30  | 4:00 | CSG(N)   | Hold TBRA, lay down 25ft of 13-3/8" CSG from load #19 to #43.<br>Confirmed float functioning - OK  |
| 6:30   | 7:30  | 1:00 | CSG(N)   | Stopped boosting roer to let the mud drained from 20"CSG shoe. Monitor well on trip tank - well static.  |
| 7:30   | 9:30  | 2:00 | CSG(N)   | Rig down casing elevator and rig up hydraulic elevator.<br>Make up 13-3/8"CSG HGR joint x 3m pup joint x PADPRT w/SST x XO x 5-1/2"DP S-150 6m pup x 2 XO x 5-7/8"DP NK-155 2 js.  |
| 9:30   | 10:00 | 0:30 | CSG(N)   | Rig down Flush Mount Spider, power tong and install master bushing on rotary table.  |
| 10:00  | 14:30 | 4:30 | CSG(N)   | Cut & slip drilling line at 2,054mBRT (13-3/8" CSG shoe depth). T.M: 9789. Booster 150gpm x 1.7MPa, loss rate 0.5m3/hr.  |
| 14:30  | 16:15 | 1:45 | CSG(N)   | RIH 13-3/8"CSG to 2545.8mBRT with 5-7/8"DP NK-155. No loss while RIH.<br>Drag 80-100KN at 5-7/8"DP #2 std. Drag is decreased gradually while RIH and no drag at 5-7/8"DP #6 std.   |
| 16:15  | 16:30 | 0:15 | RR       | Find leak of #1 Hydracker hose. Shift to #2 Hydracker.   |
| 16:30  | 17:45 | 1:15 | CSG(N)   | Resume RIH 13-3/8"CSG to 2737.5mBRT with 5-7/8"DP. No loss while RIH.<br>Meanwhile, finish repairing of #1 Hydracker. Shift to #1 Hydracker.   |
| 17:45  | 22:00 | 4:15 | CSG(N)   | RIH 13-3/8"CSG to 3469.5mBRT with 6-5/8"DP UD-165.<br>Change flow line (bypass sand trap). Open kill line and pump 50gpm while RIH.<br>Connect HPS and run down every stand. Loss rate 0.5m3/hr.<br>Drag 50-80KN #3 - 17 stand while RIH. Drag 100KN #18 and 19 stand while RIH. |
| 22:00  | 22:30 | 0:30 | Other(N) | Found deformed insert ball and 750ton manual slip.<br>Change insert ball from auxiliary well and new manual slip.  |
| 22:30  | 24:00 | 1:30 | CSG(N)   | Resume RIH 13-3/8"CSG to 3734.1mBRT with 6-5/8"DP. Loss rate 0.5m3/hr.<br>Connect to HPS, pump down at 150gpm x 1.5MPa.<br>Drag 50-150KN #20 - 22 and 24 - 26 stand while RIH (150 - 190KN at #23 stand).<br>Meanwhile,<br>Repair DCU of CMTG unit by Schlumberger Engineer.     |
| Boat   |       |      |          |  |
| Offload 2ea full (mud) skips to Shincho-maru.  |       |      |          |  |
| Load mud chemical, Anderreamer and 11-3/4"Liner hanger setting tool from KAIYU.  |       |      |          |  |
| Note:<br>Inject 6 gal glycol to LMRP and Wellhead connector. Check Bull's eye and wellhead condition, found 40% hydrate.<br>Mud lost in 17" hole section: 10m3/day, total 428m3.<br>Sea current @ Chikyu 0.8-2.2 knot. Swell SW: 1.0-4.1 knot. |       |      |          |  |
| Time Breakdown (00:00 - 06:00 on 22-Nov ) * The data on 00:00 - 06:00 is unofficial.   |       |      |          |  |

|      | Angle | Deg  |
|------|-------|------|
| LFJ  | 0     | 0.00 |
| LMRP | 130   | 1.00 |
| BOP  | 160   | 0.50 |

Bull's eye reading @10:47

| From   | To   | Hrs  | Code   | Detail of Operation  |
|--|------|------|--------|--|
| 0:00   | 0:15 | 0:15 | CSG(N) | Continue run 13-3/8" CSG from 3734 to 3755mBRT. Loss rate 0.5m3/hr.  |
| 0:15   | 4:00 | 3:45 | CSG(N) | Run 13-3/8" CSG from 3755 to 3810mBRT. Tight spot from 3755mBRT to 3779mBRT. Loss rate 0.9m3/hr.<br>Worked string down 700-1000KN, increased flow to 300gpm x 4.0MPa, increment of pressure was observed due to packing off.                       |
| 4:00   | 5:45 | 1:45 | CSG(N) | Continue running 13-3/8" CSG on 6-5/8" DP from 3810 to 3962mBRT. Loss rate 0.5m3/hr.<br>Tight spot from 3927 to 3949mBRT. Worked string down 700-1000KN, increased flow to 300gpm x 4.0MPa, increment of pressure was observed due to packing off. |
| 5:45   | 6:00 | 0:15 | CSG(N) | Make up cement stand.  |
| Note:<br>Sea current: Chikyu 3.0 knot, 5 mile SW 2.7 knot @6:00. |      |      |        |  |

| BT No. | Size (in) | MFR | Type | IADC Code | S.No. | Nozzles | Depth (m) |    | Meter-age | Hrs. | WOB (kN) |      | rpm  |      | Total Rev (krev) | Dull Condition |       |      |                                      |   |   |      |    |
|--------|-----------|-----|------|-----------|-------|---------|-----------|----|-----------|------|----------|------|------|------|------------------|----------------|-------|------|--------------------------------------|---|---|------|----|
|        |           |     |      |           |       |         | From      | To |           |      | Min.     | Max. | Min. | Max. |                  | Inner          | Outer | Dull | Loc.                                 | B | G | O.D. | RP |
|        |           |     |      |           |       |         |           |    |           |      |          |      |      |      |                  |                |       |      | Hook Wt. (kN) @ 3734.0 mBRT          |   |   |      |    |
|        |           |     |      |           |       |         |           |    |           |      |          |      |      |      |                  |                |       |      | 6-5/8"DP UD-165 Stand #26 4,180      |   |   |      |    |
|        |           |     |      |           |       |         |           |    |           |      |          |      |      |      |                  |                |       |      | 5-7/8" NK-155 stand #19 3,054        |   |   |      |    |
|        |           |     |      |           |       |         |           |    |           |      |          |      |      |      |                  |                |       |      | 13-3/8"CSG & PADPRT 2,650            |   |   |      |    |
|        |           |     |      |           |       |         |           |    |           |      |          |      |      |      |                  |                |       |      | Hook block & HPS 740                 |   |   |      |    |
|        |           |     |      |           |       |         |           |    |           |      |          |      |      |      |                  |                |       |      | Hook block 460                       |   |   |      |    |
|        |           |     |      |           |       |         |           |    |           |      |          |      |      |      |                  |                |       |      | Cutting skip @24:00                  |   |   |      |    |
|        |           |     |      |           |       |         |           |    |           |      |          |      |      |      |                  |                |       |      | Empty 35 Full 0 Total 35             |   |   |      |    |
|        |           |     |      |           |       |         |           |    |           |      |          |      |      |      |                  |                |       |      | ROV Status Diving                    |   |   |      |    |
|        |           |     |      |           |       |         |           |    |           |      |          |      |      |      |                  |                |       |      | Last Dive Injection Skid 36 /135 gal |   |   |      |    |

| BHA Record   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Mud Properties |       |              |      |     |    |    |                                |    |      |     |      |     |        |     |       |     |               |    |   |        |      |      |     |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----------------|-------|--------------|------|-----|----|----|--------------------------------|----|------|-----|------|-----|--------|-----|-------|-----|---------------|----|---|--------|------|------|-----|
| F/S x 13-3/8"CSG (9) x F/C x 13-3/8"CSG (167) x 13-3/8"CSG pup (3m) x CSG hanger x PADPRT x XO x 5-1/2"DP S-150 (6m) x XO x XO x 5-7/8"DP NK-155 (3) x 5-7/8"DP NK-155 18stds<br>x XO x 6-5/8"DP UD-165 1std x 6-5/8"DP (6m) x 6-5/8"DP 31stds x CMT stand |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Mud Type       | Time  | Depth (mBRT) | MW   | VIS | PV | YV | Gel St. (10 <sup>3</sup> /10') | WL | Cake | pH  | PI   | Cl- | Sand   | Oil | Solid | MBC | Temp (In/Out) | K+ | n | K      | LGS  |      |     |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | KNPP           | 8:00  | Pt           | 1.13 | 120 | 41 | 49 | 9                              | 11 | 3.0  | 0.5 | 10.0 | 0.1 | 71,000 | 0.1 | 0     | 7.0 | 1             | 11 |   | 27,500 | 0.54 | 3.08 | 1.1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | KNPP           | 20:00 | Pt           | 1.13 | 118 | 41 | 48 | 8                              | 11 | 3.0  | 0.5 | 10.0 | 0.1 | 71,000 | 0.1 | 0     | 7.0 | 1             | 11 |   | 26,500 | 0.53 | 1.93 | 1.1 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Spacer         | 18:00 |              | 1.50 | 39  | 13 | 30 | 12                             | 15 |      |     |      |     |        |     |       |     |               |    |   |        |      |      |     |

| Mud Pumps : 14-P-220 @ 5.00 gal/min stroke @97% |            |     |     |              |                   |     |      |          |               |                     |     |           |       |              | Personnel @24:00 |        |            |       |                 |                |                      |           |         |       |     |
|---|------------|-----|-----|--------------|-------------------|-----|------|----------|---------------|---------------------|-----|-----------|-------|--------------|------------------|--------|------------|-------|-----------------|----------------|----------------------|-----------|---------|-------|-----|
| No.   | Liner Size | SPM | GPM | Press. (MPa) | Ann. Vel. (min/m) | CSG | CDCX | MQJ Crew | MQJ (SC.Over) | MQJ (Sub sea & Hyd) | MWJ | Scientist | Telit | Ooaseneering | Schlumberger-CMT | SLB WL | Geoservice | Vetco | Halliburton-LWD | Halliburton-DD | Weatherford (casing) | MI-Siwaco | Tenaris | Total |     |
| 1   | 6"         |     |     |              |                   |     |      |          |               |                     |     |           |       |              |                  |        |            |       |                 |                |                      |           |         |       | 161 |
| 2   | 6"         | 0   | 0   |              |                   |     |      |          |               |                     |     |           |       |              |                  |        |            |       |                 |                |                      |           |         |       |     |
| 3   | 6"         |     |     |              |                   |     |      |          |               |                     |     |           |       |              |                  |        |            |       |                 |                |                      |           |         |       |     |

| Mud Materials on Board @24:00hrs |            |               |               |                        |            |               |               |                      |          |      |             |                    |          |             | Material Stock on Board @24:00hrs |  |  |  |  |  |  |  |  |  |
|----------------------------------|------------|---------------|---------------|------------------------|------------|---------------|---------------|----------------------|----------|------|-------------|--------------------|----------|-------------|-----------------------------------|--|--|--|--|--|--|--|--|--|
| Item                             | Received   | Used          | Stock         | Item                   | Received   | Used          | Stock         | Item                 | Received | Used | Stock       | Item               | Received | Used        | Stock                             |  |  |  |  |  |  |  |  |  |
| Barte (Bulk)                     |            |               | 208.800       | NaCl                   |            | 7,000         | 26,000        | Weatherford (casing) | 4        |      | 3,200       | NaOH               |          | 375         | 800                               |  |  |  |  |  |  |  |  |  |
| Kunigel-VO (Bulk)                |            |               | 10,800        | KCl                    | 20,000     | 6,000         | 20,000        | MI-Siwaco            | 4        | 200  | 800         | Defoamer 30C       |          | 192         | 192                               |  |  |  |  |  |  |  |  |  |
| NaCl                             |            | 7,000         | 26,000        | Tel-Polymer DX / L / H | 2240/720/0 | 1860/1220/380 | 4860/1620/800 | Halliburton-LWD      | 3        |      | 1,240       | Telrite GXL        |          | 54          | 54                                |  |  |  |  |  |  |  |  |  |
| KCl                              | 20,000     | 6,000         | 20,000        | XCD-Polymer            | 0          | 375           | 200           | Defoamer 30C         |          |      | 192         | Tel DD             |          | 3,200       | 3,200                             |  |  |  |  |  |  |  |  |  |
| Tel-Polymer DX / L / H           | 2240/720/0 | 1860/1220/380 | 4860/1620/800 | Soda Ash               |            | 375           | 325           | Telrite              | 2        |      | 325         | NaOH               |          | 375         | 2,175                             |  |  |  |  |  |  |  |  |  |
| XCD-Polymer                      | 0          | 375           | 200           | KOH                    | 1,600      | 375           | 2,175         | Ooaseneering         | 6        |      | 2,175       | Clean Lubr         |          | 7,200       | 5,600                             |  |  |  |  |  |  |  |  |  |
| Soda Ash                         |            | 375           | 325           | Schlumberger-CMT       | 4          | 7,200         | 5,600         | SLB WL               | 0        |      | 0           | Tel Clean          |          | 0           | 0                                 |  |  |  |  |  |  |  |  |  |
| KOH                              | 1,600      | 375           | 2,175         | Geoservice             | 6          | 2,100         | 2,100         | Bi-Carbonate         |          |      | 2,100       | Tel Carbonate      |          | 2,100       | 2,100                             |  |  |  |  |  |  |  |  |  |
| Schlumberger-CMT                 | 4          | 7,200         | 5,600         | Vetco                  | 1          | 1,240         | 1,240         | Lim                  |          |      | 1,240       | Defoamer 30C       |          | 192         | 192                               |  |  |  |  |  |  |  |  |  |
| SLB WL                           | 0          | 0             | 0             | Halliburton-LWD        | 3          | 1,240         | 1,240         | Telrite GXL          |          |      | 54          | Telrite GXL        |          | 54          | 54                                |  |  |  |  |  |  |  |  |  |
| Geoservice                       | 6          | 2,100         | 2,100         | Weatherford (casing)   | 4          | 3,200         | 3,200         | Tel Plug C / M / F   |          |      | 500/0/0     | Tel Plug C / M / F |          | 500/220/0   | 500/220/0                         |  |  |  |  |  |  |  |  |  |
| Vetco                            | 1          | 1,240         | 1,240         | MI-Siwaco              | 4          | 800           | 800           | Tan Cal M / F / FF   |          |      | 0/4230/4500 | EZ Spot            |          | 550         | 550                               |  |  |  |  |  |  |  |  |  |
| Halliburton-LWD                  | 3          | 1,240         | 1,240         | Tenaris                | 1          | 1             | 1             | Speeder P / X        |          |      | 1700 / 1700 | Speeder P / X      |          | 1700 / 1700 | 1700 / 1700                       |  |  |  |  |  |  |  |  |  |
| Halliburton-DD                   | 0          | 0             | 0             | Total                  | 161        |               |               | Barason-100 (gal)    |          |      | 0           | Barason-100 (gal)  |          | 0           | 0                                 |  |  |  |  |  |  |  |  |  |
| Weatherford (casing)             | 4          | 3,200         | 3,200         | Mud Volume (m3)        |            |               |               | Astax S              |          |      | 9,600       | Astax S            |          | 9,600       | 9,600                             |  |  |  |  |  |  |  |  |  |
| MI-Siwaco                        | 4          | 800           | 800           | KNPP mud (1.13)        | 129        |               |               | Treat HS             |          |      | 0           | Treat HS           |          | 0           | 0                                 |  |  |  |  |  |  |  |  |  |
| Tenaris                          | 1          | 1             | 1             | KNPP mud (1.12)        | 0          |               |               | Rester               |          |      | 0           | Rester             |          | 0           | 0                                 |  |  |  |  |  |  |  |  |  |
| Total                            | 161        |               |               | KNPP mud (1.11)        | 480        |               |               | Telrite OS-5         |          |      | 0           | Telrite OS-5       |          | 0           | 0                                 |  |  |  |  |  |  |  |  |  |
| KNPP mud (1.13)                  | 129        |               |               | LCM 20% (1.13)         | 24         |               |               | Telrite HEC          |          |      | 0           | Telrite HEC        |          | 0           | 0                                 |  |  |  |  |  |  |  |  |  |
| KNPP mud (1.12)                  | 0          |               |               | H-vis (1.12)           | 11         |               |               |                      |          |      |             |                    |          |             |                                   |  |  |  |  |  |  |  |  |  |
| KNPP mud (1.11)                  | 480        |               |               | KNPP (1.28)            | 2          |               |               |                      |          |      |             |                    |          |             |                                   |  |  |  |  |  |  |  |  |  |
| LCM 20% (1.13)                   | 24         |               |               | total                  | 648        |               |               |                      |          |      |             |                    |          |             |                                   |  |  |  |  |  |  |  |  |  |
| H-vis (1.12)                     | 11         |               |               |                        |            |               |               |                      |          |      |             |                    |          |             |                                   |  |  |  |  |  |  |  |  |  |
| KNPP (1.28)                      | 2          |               |               |                        |            |               |               |                      |          |      |             |                    |          |             |                                   |  |  |  |  |  |  |  |  |  |
| total                            | 648        |               |               |                        |            |               |               |                      |          |      |             |                    |          |             |                                   |  |  |  |  |  |  |  |  |  |

| Shale Shaker |   |      |   |      |     |           |               |             |         |  |  |  |  |  | Safety (HSE) and other information |  |  |  |  |  |  |  |  |  |
|--------------|---|------|---|------|-----|-----------|---------------|-------------|---------|--|--|--|--|--|------------------------------------|--|--|--|--|--|--|--|--|--|
| No.1         | #10, #180 x 2   | No.4 | #10, #180 x 2   | No.1 | off | Incident  | Last Incident | 13/Feb/2013 | No. LTA |  |  |  |  |  |                                    |  |  |  |  |  |  |  |  |  |
| No.2         | #10, #175 x 2 <td>No.5</td> <td>#10, #180 x 2 <td>No.2</td> <td>off</td> <td>LTA</td> <td></td> <td></td> <td></td> </td>         | No.5 | #10, #180 x 2 <td>No.2</td> <td>off</td> <td>LTA</td> <td></td> <td></td> <td></td>         | No.2 | off | LTA       |               |             |         |  |  |  |  |  |                                    |  |  |  |  |  |  |  |  |  |
| No.3         | #10, #180 x 2 <td>No.6</td> <td>#10, #180 x 2 <td>No.3</td> <td>off</td> <td>HMS cards</td> <td>16</td> <td></td> <td></td> </td> | No.6 | #10, #180 x 2 <td>No.3</td> <td>off</td> <td>HMS cards</td> <td>16</td> <td></td> <td></td> | No.3 | off | HMS cards | 16            |             |         |  |  |  |  |  |                                    |  |  |  |  |  |  |  |  |  |

| Materials Stock on Board @24:00 |      |          |      |          |                      |                                      |      |       |                    |              |      |       |                       |          | Marine Information @24:00 |         |  |  |  |  |  |  |  |  |
|---------------------------------|------|----------|------|----------|----------------------|--------------------------------------|------|-------|--------------------|--------------|------|-------|-----------------------|----------|---------------------------|---------|--|--|--|--|--|--|--|--|
| Item                            | Unit | Received | Used | Stock    | Item                 | Received                             | Used | Stock | Item               | Received     | Used | Stock | Item                  | Received | Used                      | Stock   |  |  |  |  |  |  |  |  |
| Fresh Water                     | m3   | 91.0     | 96.0 | 328.5    | Heave (m)            |                                      |      | 0.1   | Pitch (deg)        |              |      | 0.2   | Roll (deg)            |          |                           | 0.1     |  |  |  |  |  |  |  |  |
| Potable Water                   | m3   | 0.0      | 6.4  | 321.1    | Vessel Heading (deg) |                                      |      | 271   | Riser Tension (kN) |              |      | 8700  | V.D. Load (Moon)      |          |                           | 13901.7 |  |  |  |  |  |  |  |  |
| Drill Water                     | m3   | 0.0      | 5.1  | 1,645.6  | Max Draught (m)      |                                      |      | 9.0   | Thruater (kW)      |              |      | 1940  | Well Cost (1,000 Yen) |          |                           |         |  |  |  |  |  |  |  |  |
| Fuel                            | m3   | 0.0      | 49.1 | 5,137.1  | Daily                |                                      |      |       | Cumulative         |              |      |       |                       |          |                           |         |  |  |  |  |  |  |  |  |
| Lube, Oil                       | Ltrs | 0.0      | 0.0  | 76,100.0 | Reported by :        | S. Kataoka / T. Yokoyama / S. Yamada |      |       | Approved by :      | T. Sanuhashi |      |       |                       |          |                           |         |  |  |  |  |  |  |  |  |
| Heli Fuel                       | Ltrs | 0.0      | 0.0  | 0.0      |                      |                                      |      |       |                    |              |      |       |                       |          |                           |         |  |  |  |  |  |  |  |  |
| Cement "GWC"                    | ton  | 0.0      | 0.0  | 82.0     |                      |                                      |      |       |                    |              |      |       |                       |          |                           |         |  |  |  |  |  |  |  |  |
| Cement "G"                      | ton  | 0.0      | 0.0  | 161.0    |                      |                                      |      |       |                    |              |      |       |                       |          |                           |         |  |  |  |  |  |  |  |  |

| Boat Information @24:00 |                            |               |              |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|----------------------------|---------------|--------------|--|--|--|--|--|--|--|--|--|--|--|
| Boat Name               | Status                     | Time Departed | Time Arrived |  |  |  |  |  |  |  |  |  |  |  |
| Kaiyu                   | Shingyu                    | -             | 15:25        |  |  |  |  |  |  |  |  |  |  |  |
| Shinchou-maru           | Chikyu                     | 15:30         | -            |  |  |  |  |  |  |  |  |  |  |  |
| Hakuryu-maru            | Current survey @ 5miles SW | -             | -            |  |  |  |  |  |  |  |  |  |  |  |

| Weather Information |         |              |                 |            |                 |            |            |                    |            |                 |     |      |  |  |
|---------------------|---------|--------------|-----------------|------------|-----------------|------------|------------|--------------------|------------|-----------------|-----|------|--|--|
| Time                | Weather | Temp. (degC) | Barometer (hPa) | Wind (m/s) | Wave Height (m) | Dir. (deg) | Period (s) | Current Speed(knt) | Dir. (deg) | Visibility (km) |     |      |  |  |
| 24:00               | bc      | 14.0         | 1021.2          | 7.9        | 290.0           | 8.9        | 0.9        | 280                | 5.6        | 2.5             | 106 | 22.0 |  |  |

Today's Schedule : 13-3/8" cementing, set wear bushing.