

Chikyu DAILY MORNING REPORT

Mission No. : CK18-04Exp. No. : Exp 358Report No. : 67

Site NameC0002Hole NameC0002Q

Lat. 33° 18.0507'NLong. 136° 38.2029'ESeabed Depth : 1,967.5 mBRT

Depth : @24.00 5,230.0 mBRT3262.5 mbsfProgress : 0.0 mDrilling/Coning/Underreaming Hrs. : 7.25 hrsLast BOP PT: 12/8/2018

Depth : @06:00 5,230.0 mBRT3262.5 mbsfLAST CASING : 11-3/4" x 2,922.50 mbsf(4,890.0 mBRT)Last BOP FT: 12/8/2018

Summary of Operation on 12-Dec : Cont. Wash/Ream down. Take survey. Open 12-1/4" hole to 4,928mBRT. Circulation and bottoms up. Ream down.

Present Operation @ 06:00 on 13-Dec : Ream down to 4,926mBRT.

Time Breakdown (00:00 - 24:00 on 12-Dec

Report Date : 13/Dec/2018

Next BOP PT: 12/29/2018

Next BOP FT: 12/15/2018

12/4/2018

mBRT: meter below rotary table

mbsf: meter below sea floor

FromToHrsCodeDepth(mBRT)

0:001:001:00OTHER5,230.0

1:002:001:00OTHER5,230.0

2:002:450:45OTHER5,230.0

2:453:150:30OTHER5,230.0

3:154:451:30OTHER5,230.0

4:456:301:45OTHER5,230.0

6:306:450:15OTHER5,230.0

6:457:000:15OTHER5,230.0

7:0011:304:30OTHER5,230.0

11:3012:150:45OTHER5,230.0

12:1514:302:15OTHER5,230.0

14:3014:450:15OTHER5,230.0

14:4515:300:45OTHER5,230.0

15:3020:305:00OTHER5,230.0

20:3023:303:00OTHER5,230.0

23:3024:000:30OTHER5,230.0

Detail of Operation

Take survey at 4,918mBRT.

Survey result : 4,907.021mBRT, Inclination 1.57deg, Azimuth: 41.38deg

Wipe from 4,912mBRT to 4,918mBRT for 30mins

MP : 600gpm x 22.5MPa, HPS: 80rpm x 12-32kNm

Wash and ream down from 4,883mBRT to 4,918mBRT to confirm entering same hole.

Take weight 200kN at 4,912mBRT and start reaming down.

MP : 600gpm x 22.6 - 23.4MPa, HPS: 80-80rpm x 14-32kNm

Take survey at 4,918mBRT.

Survey result : 4,906.583mBRT, Inclination 1.63deg, Azimuth: 35.68deg

Confirm BHA entering into same hole.

Wash down from 4,883mBRT to 4,916mBRT to confirm BHA entering same hole without rotating.

Take weight 200kN at 4,912mBRT and unable to path through below 4,916mBRT.

Take survey at 4,909mBRT, 4,900mBRT and 4,890mBRT.

Observe no excessive over pull while pulling up.

Down link to change to delay survey mode by fluctuating pump rate.

Take survey at 4,892mBRT.

Ream down to 4,920mBRT.

MP: 600gpm x 22.8 - 24.3MPa, HPS: 80rpm x 14-32kNm

Observe HPS torque fluctuate from 4,912-4,920mBRT. Wipe several times at same section.

Space out for drilling down.

Lay out NSD sub and 1 joint of 6-5/8" DP UD-165 on #2 NSD stand.

Make connection #3 NSD stand with 3m rvp joint.

Drill down from 4,920mBRT to 4,924mBRT.

From 4,920mBRT to 4,921mBRT.

MP: 600gpm x 24.25MPa, HPS: 100-140rpm x 17-22kNm. Pump 3m3 of 12ppb fracseal every per hour

From 4,921mBRT to 4,926mBRT, increase ROP from 4,922mBRT to 4,924mBRT.

MP: 600gpm x 22-23MPa, HPS: 140rpm x 19-23kNm. Pump 3m3 of 12ppb fracseal every per hour

Take survey at 4,922.4mBRT.

Survey result : 4,910.439mBRT, Inclination 2.28deg, Azimuth: 57deg

Activate Z-Reamer at 4,916mBRT.

Pump w/600gpm x 24.0MPa

Check PU/SO weight: 3,000kN / 2,800kN. Free rotation torque: 60, 100, 120rpm x 16-17, 18-19, 19-20kNm

Drop ball and chase pumping w/ 500gpm x 17MPa and 10rpm x 14-17kNm (15min)

After chase w/15min, reduce pump rate to 50gpm x 2.6MPa(5min). Then confirm ball landing onto Z-Reamer by pressure increase to 3.7MPa

Increase pump rate to 120gpm x 10.2MPa and confirm shear the shear pin by pressure drop to 3.6MPa

Check rotation torque w/60rpm x 16-18kNm then start pump w/600gpm x 23.1MPa (pressure before activate: 24.0MPa, Pressure drop 0.9MPa)

Open 8-1/2" to 12-1/4" hole from 4,916mBRT to 4,928mBRT.

From 4,916mBRT to 4,921mBRT.

WOB: 20-80kN, HPS: 80rpm x 11-29kNm, MP: 625gpm x 23.0MPa, Pump 3m3 of 12ppb fracseal every per hour

Observe HPS torque decrease from 4,918mBRT to 4,921mBRT (HPS: 80rpm x 17-18kNm)

From 4,921mBRT to 4,923mBRT.

WOB: 20-80kN, HPS: 80-100rpm x 17-34kNm, MP: 625gpm x 23.0MPa, Pump 3m3 of 12ppb fracseal every per hour

Stall HPS at 4,922mBRT to 4,923mBRT and Downhole ECD increase to 1.445sg

Pick up to 4,919mBRT and confirm pipe free w/30rpm x 15-34kNm, MP: 200gpm x 5.2MPa. (Downhole ECD drop to 1.439sg)

Continue pick up from 4,919mBRT to 4,914mBRT (cutter depth 4,885mBRT) to confirm 12-1/4" UR passing through w/o any excessive torque. OK

From 4,914mBRT to 4,925mBRT

WOB: 0-20kN, HPS: 80-100rpm x 14-29kNm, MP: 625gpm x 22.0-24.0MPa. Pump 3m3 of 12ppb fracseal every per hour

From 4,925mBRT to 4,928mBRT.

WOB: 20-80kN, HPS: 100-120rpm x 18-34kNm, MP: 625gpm x 24.7-25.5MPa. Pump 3m3 of 12ppb fracseal every per hour

Stall HPS at 4,927mBRT and increase Downhole ECD: 1.43 to 1.45sg

Pick up to 4,914mBRT and confirm pipe free. (Downhole ECD drop to 1.429sg)

Circulation and bottoms up

Pump 3m3 of 12ppb fracseal

Work pipe from 4,914mBRT to 4,916mBRT, 30rpm x 14-20kNm, 625gpm x 23.6MPa (Downhole ECD: 1.426sg)

Ream down from 4,914mBRT to 4,919mBRT

WOB: 20-80kN, HPS: 80-120rpm x 17-33kNm, MP: 625gpm x 23.5MPa. Pump 3m3 of 12ppb fracseal

Observe high torque 33kNm at 4,919mBRT (Down hole ECD 1.436sg). Pick up to 4,915.5mBRT (Downhole ECD drop to 1.428sg)

[Vessel status]

(6:50-8:00) Advisory status, due to wind speed >18m/s

Ditch magnet: 4.0kg (Total 175.8kg)

Time Breakdown (00:00 - 06:00 on 13-Dec)

* The data on 00:00 - 06:00 is unofficial.

FromToHrsCodeDepth(mBRT)

0:006:006:00OTHER5,230.0

Detail of Operation

Continue reaming down to 4,926mBRT.

WOB: 0-20kN, HPS: 80-50rpm x 12-34kNm, MP: 600-625gpm x 22.2 - 23.5MPa. Pump 3m3 of 12ppb fracseal every 1 hour.

Observe high torque and stall HPS with 33kNm at 4,923mBRT. Pick up to 4,919mBRT (Downhole ECD 1.438-1.442sg)

Resume reaming and stall HPS at 4,923mBRT. Pick up to 4,919mBRT (Downhole ECD 1.434-1.435sg)

Resume reaming and stall HPS at 4,926mBRT. (Downhole ECD 1.433-1.434sg)

Pick up pipe to 4,920mBRT, but pipe stall again. Pick up pipe to 4,914mBRT

Bit Record @24:00

Bit No. 5

Size (in) 8.5

MFR Smith

Type wellbore XSB

IADC Code M23

S/No. QF3237

Nozzles 3x12/12 3x13/10

Depth (mBRT) From 4,860.0 To 4,928.0

Meter-agg 68.0

Hrs. 48.17

WOB (kN) Min. 0 Max. 100

rpm Min. 60 Max. 140

Total Rev. (krev) 15.4

ROP (m/hr) 4.1

Inner

Outer

Dull

Loc.

B

G

O.D.

RP

BHA Record @24:00

#14

8.5"x12.25"-8-1/2" Bit x Bit sub w/in-ported x XO x arcVision675 x TeleScope675 x XO x 8-1/4" Stabilizer x 6-3/4"DC (1) x Z-Reamer x Float sub w/in-ported float x 6-3/4"DC (1) x 8-1/8" Stabilizer x 6-3/4"DC (10)

LWD

Mud Properties @24:00

Mud Type

Time

Depth (mBRT)

MW

Vis

PV

YV

Spum

Gel St. (10", 10')

API

Cake

pH

PI

Cl-

Sand

Oil

Solid

MBC

Temp. In Out

K+

n

K

LGS

FIT 20/40 (mm) 0 min 5 min

KNPP

3:30

4,910

137

65

23

33

12

12

19

5.0

0.8

10.0

0.1

128.00

0.10

17.0

1.50

13

12

22.00

0.42

3.61

3.40

17

Over

Mud Pump: 14-P-220

5.00 gallons/stroke @97%

Personnel @24:00

CDEX

8

MOJ Crew

103

MOJ (Other)

0

MWJ

15

Scientist

4

Telinte

2

Oceanering

6

SLB Cementing

2

SLB WL

0

Geoservices

6

M-I SWACO

4

SLB Underreamer

2

SLB LWD

2

SLB Seismic

0

AFGlobal

2

ENVENTURE

0

SLB DD

0

Franks

0

Total

156

Mud Materials on Board @24:00hrs

(unit: kg)

Item

Received

Used

Stock

Barite (Bulk)

546,500

1,200

545,300

Caustic Soda

200

0

200

Lime

850

0

850

Soda Ash

200

0

200

Caustic Potash

460/700/0

0

460

Tel-Polymer DX / L / H

1,275

0

1,275

XCD-Polymer

4,500

0

4,500

Lignite NC

0

0

0

Clean Lube W

6,400

0

6,400

Tel Clean W

0

0

0

Astex-S

968

0

968

Deformer 30C

1,250

0

1,250

Tel DD

2,275

0

2,275

Bi-Carbonate

1,020 / 210 / 510

0

1,020

Citric Acid

684

0

684

Tan Cal M / F / FF

9,200

0

9,200

Telinte GXL

130

0

130

Treat-HS

500 / 500 / 500

0

500

Mud Seal P

500 / 260

0

500

Tel Plug C / M / F

105

0

105

Tel Stop P / G

0

0

0

Balofit

0

0

0

Driscol D

0

0

0

Tel Flow P

0

0

0

Poro Seal

5,500

0

5,500

Steel Seal 50

10,000

0

10,000

KCI

0

0

0

NuCl

4,500

0

4,500

Fracseal

8,000

0

8,000

Stopseal

46,000

0

46,000

Bentonate(Bulk)

0

0

0

Mud volume@24:00

Mud Volume (m3)

KNPP mud (1.37)

492

Slug mud

101

KNP mud (1.35)

16

66

total

675

Boat Information @24:00

Boat Name

Status

Time @Chikyu

Departed

Arrived

#8 Meiji-maru

NE Smile

Akatsuki

Shingu

Shincho-maru

Chikyu

Weather Information

Time

Weather

Temp. (degC)

Air

SW

Barometer (hPa)

Wind

Speed (m/s)

Dir. (deg)

Gust (m/s)

Wave

Height (m)

Dir. (deg)

Period (s)

Current

Speed(knt)

Dir. (deg)

Visibility

(km)

24:00

bc

11.0

19.3

1019.8

12.6

2

14.8

1.9

20

5.6

0.7

264

22.0

Today's Schedule:

Ream down to 4,920mBRT.

Heel Information @24:00

Fit.

No.

Arrived

Departed

Passenger

Arr.

Dept.

1

10:18

10:29

9

9

2

12:27

12:33

3

3

3

4

Incident (HSE) and other information

Safety

Last Incident

No. LTA

LTA

20

HUNS cards

135 / 135 gal

Remarks

Marine Information @24:00

Heave (m)

Pitch (deg)

Roll (deg)

Vessel Heading (deg)

Riser Tension (kN)

V.D. Load (ton)

Max Draught (m)

Thruster (kW)

0.5

0.3

0.2

9600.0

1504

1150

Reported by : N. Sakurai / T. Nishiyama

Approved by : T. Saruhashi