

Chikyu DAILY MORNING REPORT

Mission No. :CK24-01

Exp. No. :405

Report No. :15

Site NameJTCT-01AHole NameC0019H

Lat.37°56.3404'NLong.143°54.7907'ESeabed Depth :6,926.0mBRTRT-MSL :28.5 m

Report Date :21/Sep/2024

Depth : @24:007,882.0mBRT956.0mbsf

Depth : @06:007,906.0mBRT980.0mbsf

Summary of Operation on20-Sep :Drill 8-1/2"LWD hole(C0019H) to 7,882.0mBRT.

Present Operation @ 06:00 on21-Sep :Drill 8-1/2"LWD hole(C0019H) to 7,906.0mBRT.

mBRT: meter below rotary table

mbsf: meter below sea floor

FromToHrsCodeDepth(mBRT)

0:0024:000:00DRL7,882.0

Drill 8-1/2"LWD hole (C0019H) to 7,711.0mBRT (785.0mbsf)

Sweep 7m3 of SWG every stand.

7,711.0mBRT - 7,719.0mBRT (785.0 - 793.0mbsf) WOB 0-40kN, HPS 80rpm x 0.1-13.8kNm, MP 550gpm x 18.2-18.9MPa. Set ROP 30m/hr

Reduce ROP set from 30m/hr to 20m/hr for attempting to minimize stick-slips.

7,719.0mBRT - 7,728.0mBRT (793.0 - 802.0mbsf) WOB 0-30kN, HPS 80rpm x 0.1-9.4kNm, MP 550gpm x 18.1-18.9MPa. Set ROP 20m/hr

Reduce ROP set from 20m/hr to 15m/hr for attempting to minimize stick-slips.

7,728.0mBRT - 7,752.0mBRT (802.0 - 826.0mbsf) WOB 0-30kN, HPS 80rpm x 0.1-14.2kNm, MP 550gpm x 17.8-18.8MPa. Set ROP 15m/hr

Reduce ROP set from 15m/hr to 10m/hr for attempting to minimize stick-slips.

7,752.0mBRT - 7,775.0mBRT (826.0 - 849.0mbsf) WOB 0-20kN, HPS 80rpm x 0.1-14.3kNm, MP 550gpm x 18.2-19.0MPa. Set ROP 10m/hr

Estimated plate boundary: 7,741mBRT(811mbsf)

Estimated chert top: 7,752mBRT(826mbsf)

Observe HPS torque reach set point(15kNm) several times, but not stall out.

Reduce ROP set from 10m/hr to 8m/hr.

7,775.0mBRT - 7,791.0mBRT (849.0 - 865.0mbsf) WOB 0-20kN, HPS 80rpm x 0.1-14.4kNm, MP 550gpm x 18.1-18.8MPa. Set ROP 8m/hr

Reduce HPS from 80rpm to 60rpm for attempting to minimize stick-slips.

7,791.0mBRT - 7,799.0mBRT (865.0 - 873.0mbsf) WOB 0-20kN, HPS 60rpm x 0.1-14.6kNm, MP 550gpm x 17.9-19.2MPa. Set ROP 8m/hr

Pick up 2m off bottom due to high stick-slips 2times.

7,799.0mBRT - 7,801.0mBRT (873.0 - 875.0mbsf) WOB 0-20kN, HPS 60rpm x 0.1-12.4kNm, MP 550gpm x 18.5-19.2MPa. Set ROP 10m/hr

7,801.0mBRT - 7,802.5mBRT (875.0 - 876.5mbsf) WOB 0-25kN, HPS 70rpm x 0.1-14.6kNm, MP 550gpm x 18.5-19.1MPa. Set ROP 10m/hr

Increase HPS speed to 70rpm to improve borehole image, but HPS torque reach set point frequently.

7,802.5mBRT - 7,805.0mBRT (876.5 - 879.0mbsf) WOB 0-20kN, HPS 60rpm x 0.1-11.2kNm, MP 550gpm x 18.5-19.0MPa. Set ROP 10m/hr

Pick up 2m off bottom due to high stick-slips 3times.

7,805.0mBRT - 7,833.0mBRT (879.0 - 907.0mbsf) WOB 0-40kN, HPS 60rpm x 0.1-14.6kNm, MP 550gpm x 18.4-19.1MPa. Set ROP 9m/hr

Pick up 2m off bottom due to high stick-slips 2times.

7,833.0mBRT - 7,847.0mBRT (907.0 - 921.0mbsf) WOB 0-40kN, HPS 70rpm x 0.1-12.4kNm, MP 550gpm x 18.4-19.8MPa. Set ROP 8m/hr

Pick up 2m off bottom due to high stick-slips 2times.

7,847.0mBRT - 7,865.0mBRT (921.0 - 939.0mbsf) WOB 0-40kN, HPS 80rpm x 0.1-14.6kNm, MP 550gpm x 18.4-19.8MPa. Set ROP 8m/hr

Pick up 2-5m off bottom due to high stick-slips 2times.

7,865.0mBRT - 7,867.0mBRT (939.0 - 941.0mbsf) WOB 0-40kN, HPS 70rpm x 0.1-14.6kNm, MP 550gpm x 18.3-19.3MPa. Set ROP 8m/hr

Increase the shock at BHA. Increase WOB to reduce the bouncing at BHA.

7,867.0mBRT - 7,873.0mBRT (941.0 - 947.0mbsf) WOB 0-80kN, HPS 70rpm x 0.1-9.1kNm, MP 550gpm x 18.5-19.9MPa. Set ROP 8m/hr

7,873.0mBRT - 7,875.0mBRT (947.0 - 949.0mbsf) WOB 0-100kN, HPS 70rpm x 0.1-7.1kNm, MP 550gpm x 18.8-19.7MPa. Set ROP 8m/hr

7,875.0mBRT - 7,882.0mBRT (949.0 - 956.0mbsf) WOB 0-100kN, HPS 60rpm x 0.1-14.6kNm, MP 550gpm x 19.5-20.1MPa. Set ROP 8m/hr

Increase WOB from 40 to 100kN and tend to decrease the shock at BHA.

MWD data

mBRT inclination (deg.) azimuth (deg.)

0.6 255.13

0.23 298.37

0.91 193.06

Meanwhile,

(00:45) Akatsuki arrives at Chikyu.

(00:45) Ibuki departs to Shioagama port. (ETA@Shioagama: 9/20 17:00)

(01:30-03:00) Advisory Status due to APRS issue by the noise from Akatsuki

(07:45-08:15) Advisory Status due to APRS issue by the noise from Akatsuki

(10:55-14:45) Advisory Status due to the wind speed over 18m/s.

Time Breakdown (00:00 - 06:00 on21-Sep)

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

FromToHrsCodeDepth(mBRT)

0:006:006:00DRL7,906.0

Drill 8-1/2"LWD hole (C0019H) to 7,906.0mBRT (980.0mbsf).

7,882.0mBRT - 7,906.0mBRT (956.0 - 980.0mbsf) WOB 0-110kN, HPS 60rpm x 0.1-14.6kNm, MP 550gpm x 19.0-20.4MPa. Set ROP 8m/hr

Sweep 5m3 of SWG.

Pick up single and stop rotation for reducing the shock level of LWD tools 5times.

@7,899.0mBRT Stall HPS and standpipe pressure increases to 27MPa after drilling break.

Bit Record @24:00

Bit No.8.5

Size (in)8.5

MFRSmith

TypeBXZ716M

IADC Code-

S/No.QG1125

Nozzles7 x 12

Depth (mBRT)From6,926.0To7,882.0

Meter-age956.0

Hrs.31.54

WOB (kN)Min0Max100

rpmMin55Max80

Total Rev. (krev)369.22

ROP (m/hr)9.4

Dull ConditionInnerOuterDullLoc.BG O.D.RP

BHA Record @24:00

3

8-1/2"LWD

8-1/2" Bit x 6-1/2" Mud Motor x Microscope x Telescope x SonicScope x 6-3/4" Drilling DC(11y) x Fluid sub w/float 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 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(27stds) x XO#4 x 5-1/2" DP UD-165 (30stds) x XO#5 x 6-5/8" DP Z-140 (10stds) x

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 InOut

K+

n

K

LGS

FIT 20/40 (mm)0 min5min

Mud Pumps : 14-P-220

5.00 gallon/stroke @97%

No.

Liner Size

SPM

GPM

Press. (MPa)

Ann. Vel. (m/min)

1

6"

55

275

20.1

6"DC 5"DP

2

6"

55

275

3

6"

28 18

Materials Stock on Board @24:00

Item

Unit

Stock

Used

Received

Fresh Water

m3

278.2

51.7

67.9

Potable Water

m3

300.0

3.0

0.0

Drill Water

m3

1,694.0

0.0

0.0

Fuel

m3

6,426.6

51.9

0.0

Lube Oil

Ltrs

134,200

0.0

0.0

Heli Fuel

Ltrs

0.0

0.0

0.0

Personnel @24:00

MarE3

4

MQJ Crew

97

MWJ

6

Scientist

26

LSS

3

Outreach

4

JAMSTEC

Sub-contractor

WL

SLB-LWD

4

Expro

NuStar

3

Total

147

Mud Materials on Board @24:00hrs

(unit: kg)

Item

Received

Used

Stock

Barite

76,000

Tel-Gel

208,000

Caustic soda

9,175

Lime

9,120

Flowzan

25

Mud volume

PHG (m3)

329

Kill mud (m3)

60

SWG (m3)

114

Pre-Mix (m3)

40

Marine Information @24:00

Heave (m)

0.5

Pitch (deg)

0.3

Roll (deg)

0.1

Vessel Heading (deg)

245

Riser Tension (kN)

-

V.D. Load (ton)

15372

Max Draught (m)

9.0

Thruster (kW)

500

Heli Information @24:00

Fit. No.

Time ArrivedDeparted

Passenger Are. Dept.

1

12:25 12:36

6 2

2

Boat Information @24:00

Akatsuki (Supply boat)

Status

Current survey

Ibuki (Guard boat)

Status

On Shioagama Port

HSQE and other information

Incident

Last Incident

No. LTI

LTI

11/14/19

HUNS cards

25

Remarks

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

Daily

Cumulative

Reported by : T. Miyoshi, T.Yokoyama

Approved by : I. Sawada