Chikyu DAILY MORNING REPORT

Mission No. : CK18-04 **Exp. No. :** Exp 358 **Report No. :** 121

Report Date : 5/Feb/2019

Site Name: C0002 Hole Name: C0002S Lat. 33° 18.0507'N Long. 136° 38.2029'E Seabed Depth : 1,967.5 mBRT RT-MSL : 28.5 m

Depth : @24:00 4,788.5 mBRT 2821.0 mbsf Progress : 0.0 m Drilling/Coring/Underreaming Hrs. : 0.00 hrs Last BOP PT: 1/28/2019 Next BOP PT: 2/18/2019

Depth : @06:00 4,788.5 mBRT 2821.0 mbsf LAST CASING : 9-5/8" x 11-3/4" ESET x 2,802.50 mbsf(4,770.0 mBRT) Last BOP FT: 2/4/2019 Next BOP FT: 2/15/2019

Summary of Operation on 4-Feb : POOH to 4,590mBRT. Condition mud. RIH to 4,766mBRT. Run Gyro. Orientate motor TF. Wash/Ream down to 4,788mBRT. POOH to 3,770mBRT. Last Glycol 35gal Inj. 1/29/2019

Present Operation @ 06:00 on 5-Feb : Cont. POOH to 1,242mBRT.

mBRT: meter below rotary table

Time Breakdown (00:00 - 24:00 on 4-Feb) mbsf: meter below sea floor

From	To	Hrs	Code	Depth(mBRT)	Detail of Operation
0:00	1:00	1:00	TRIP	4,788.5	Continue to POOH from 4,760mBRT to 4,590mBRT for condition mud to 1.35sg during wait on weather.
					Suspend rig up wireline sheave due to over 20m/s wind speed.
1:00	1:45	0:45	C&C	4,788.5	Condition mud to 1.35sg during wait on weather.
					Circulate w/600gpm x 20MPa and 450gpm x 4.4MPa (Booster).
					Run centrifuge to remove barite.
					Observe Active tank volume (From 159m3 to 164m3) and Flow paddle (From 47% to 60%) increased.
1:45	2:45	1:00	OTHER	4,788.5	Flow check.
					Stop circulation and check trip tank.
					Observe trip tank decreased from 9.3m3 to 8.1m3 within 30min and became stable last 15min.
					Active tank volume and flow paddle got stable.
					Check all valves and tank level. No significant sign of loss and leak.
2:45	5:45	3:00	C&C	4,788.5	Resume condition mud during wait on weather.
					Circulate w/300gpm x 6.1MPa and check Active tank volume and Flow paddle.
					Increase pump rate w/550gpm x 17MPa once confirm Active volume and Flow paddle are stabilized.
					Run centrifuge and booster pump w/450gpm x 4.7MPa.
					Cold front pass the site from 03:30 to 08:00
					Wind speed decreased gradually and complete wind direction changed at 08:00
					Weather information
					Time / Wind (m/s (Ave.) / m/s (Gust) / deg) / Wave (m / s / deg) / Current (knot / deg)
					00:00 19.0 / 21.4 / 206 3.2 / 6.8 / 210 0.7 / 277
					01:00 18.5 / 21.3 / 213 3.4 / 6.4 / 210 0.8 / 283
					02:00 18.3 / 21.2 / 212 3.5 / 6.8 / 210 0.8 / 278
					03:00 19.5 / 22.9 / 212 3.4 / 7.2 / 210 0.6 / 283
					04:00 15.7 / 17.3 / 248 3.7 / 7.1 / 210 0.6 / 286
					05:00 18.7 / 21.8 / 242 3.7 / 7.5 / 210 0.6 / 280
					06:00 17.1 / 19.3 / 240 3.4 / 7.5 / 210 0.8 / 270
					07:00 16.4 / 19.2 / 266 3.4 / 7.5 / 210 0.8 / 270
					08:00 12.5 / 14.7 / 318 3.4 / 7.9 / 240 0.6 / 268
5:45	7:15	1:30	TRIP	4,788.5	RIH 8-1/2"Kick off BHA from 4,590mBRT to 4,766mBRT.
					Derrick wind speed became less than 20m/s from 04:50
7:15	9:00	1:45	OTHER	4,788.5	Rig up Gyro and wireline equipment.
					Install 3 x wireline sheaves at derrick and drill floor.
9:00	10:45	1:45	OTHER	4,788.5	RIH Gyro assembly to 4,115mBRT (WL-depth).
					Perform checkshot survey at 3,084mBRT (WL-depth).
					1st survey; Inc 4.99deg, Azi 30.94deg. 2nd survey; Inc 5.01deg, Azi 39.01deg.
					Change ship heading to 240deg by 5deg port side.
					Reciprocate string from 4,755mBRT to 4,768mBRT 5 times.
10:45	11:45	1:00	OTHER	4,788.5	Conduct orientation survey.
					Resume RIH Gyro assembly and land UBHO sub at 4830.8mBRT (WL-depth).
					Take orientation survey 3 times before adjusting motor TF (High side).
					Rotate string 35deg CCW and Reciprocate string from 4,755mBRT to 4,768mBRT 5 times.
					Check orientation again.
11:45	13:45	2:00	OTHER	4,788.5	POOH Gyro assembly to surface.
					Confirm lead tell tale broken.
13:45	14:15	0:30	OTHER	4,788.5	Rig down Gyro tool and secure wireline equipment.
14:15	18:30	4:15	W&R	4,788.5	Wash and ream down to 4,788mBRT.
					Wash down with 400gpm x 10MPa. Take weight 50kN at 4,781mBRT.
					Rotate string 80deg CCW and attempt to pass obstacle, but take weight at 4,781mBRT.
					Ream down with 350gpm x 7.8MPa and 20rpm x 10kNm to 4,788mBRT.
					Adjust scribe line to orientate direction and attempt to reciprocate string to remove residual torque, but take weight 50kN at 4,783mBRT.
					Ream down to 4,786mBRT. WOB: 20-80kN, MP: 100-300gpm x 2.2-9.3MPa. HPS: 5-20rpm x 10-18kNm. Suspect drilling new hole from parameter.
					Decide to POOH 8-1/2" kick off assembly to surface and change 8-1/2"LWD BHA w/RSS/Voltex motor/Clink.
18:30	22:45	4:15	TRIP	4,788.5	POOH 8-1/2" kick off assembly to 3,770mBRT.
					Spot 5m3 of 12ppb Fracseal prior to POOH.
22:45	24:00	1:15	BOPE	4,788.5	BOP function test by Blue POD from Driller's panel.
					(00:00-07:30) Advisory status due to over 18m/s of wind speed.
					Ditch magnet: 4.5kg (Total 26.2kg from milling CSG window)
					No loss/gain in 24hrs

Before rotation

	Inc	Azi	Gyro TF
1st	1.89	90.70	262.16
2nd	1.89	90.12	261.26
3rd	1.89	90.49	216.89

After rotation

	Inc	Azi	Gyro TF
1st	1.91	90.85	217.21
2nd	1.92	90.24	215.08
3rd	1.90	90.49	216.89

Time Breakdown (00:00 - 06:00 on 5-Feb) * The data on 00:00 - 06:00 is unofficial.

From	To	Hrs.	Code	Depth(mBRT)	Detail of Operation
0:00	6:00	6:00	TRIP	4,788.5	POOH 8-1/2" kick off assembly from 3,770mBRT to 1,242mBRT.
					<Offline>
					Continue BOP function test (Failsafe valves) by Blue POD from Driller's panel
					Lower Outer Choke "Close" leak: 0.98 LPM.

Bit Record @24:00

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)	ROP (m/hr)	Dull Condition Inner	Outer	Dull	Loc.	B	G	O.D.	RP
10	8.5	Smith	FHK30ODPS	537	RG1504	3 x 16/32"	4,779.5	4,788.5	9.0	0.27	5	80	20	20	2.00	33.3								

BHA Record @24:00

25	8-1/2"Kick off	8-1/2"bit x Motor (A675XP w/1.15 bent angle) w/8-3/8"Stab. x 8-1/8"Stab. x Float sub w/non-ported float x 6-3/4"Pony NMDC x XO x Telescope675 w/IWOB x XO x 6-3/4"NMDC x 6-1/2"UBHO x XO x 6-3/4"Coring DC (3) x XO x 6-3/4"DC, 4-1/2IF (6) x 6-1/2"Jar x 6-3/4"DC, 4-1/2IF (2) x XO x 5.68"HWDP x XO

Hook Wt. (knt) @24:00 3,770.0 mBRT

Hook Load	2,340
BHA	220
Below DC	160
below Jar	120
HPS & Traveling block	630
Hook + RRT	-
Hook block	-

Jar Rotating time 24:(S/N: 1760-5679

Today	2.73	Total	3.58	hrs

Cutting skip @24:00

Empty	Full	Total
48	0	48

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 In	Temp Out	K+	n	K	LGS	FIT 20/40 (mm) 0 min	FIT 20/40 (mm) 5min
KNPP	5:00	4,570	1.38	57	20	25	8	7	13	7.2	1.1	9.9	0.1	120,700	0.20		19.0	2.25	11	9	20,300	0.47	1.88	6.70	-	-
KNPP	19:00	4,783	1.38	57	20	24	8	7	13	7.6	1.1	9.9	0.1	120,700	0.20		19.0	2.25	11	10	20,300	0.49	1.73	6.70	-	-

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

No.	Liner Size	SPM	GPM	Press. (MPa)	Ann. Vel. (m/min) 6.75"DC	Ann. Vel. (m/min) 5.5"DP
1	6"	0	0	0.0	0	0
2	6"	0	0			
3	6"(Booster)	0	0			

Geologic Information @24:00

From	To	Lithology of cuttings

Shale Shaker / Centrifuge @24:00

No.1	30, 270	No.4	30, 230	#1-#3 Centrifuge running time
No.2	30, 230	No.5	30, 230	
No.3	30, 230	No.6	30, 270	3.0

Materials Stock on Board @24:00

Item	Unit	Stock	Used	Received
Fresh Water	m3	260.3	99.0	47.5
Potable Water	m3	316.3	9.7	48.2
Drill Water	m3	1,081.9	13.1	0.0
Fuel	m3	3,413.6	49.2	0.0
Lube, Oil	Ltrs	68,600	500.0	0.0
Heli Fuel	Ltrs	0.0	0.0	0.0
Cement "GWC"	ton	160.0	0.0	0.0
Cement "G"	ton	97.0	0.0	0.0

Boat Information @24:00

Boat Name	Status	Time @Chikyu Departed	Time @Chikyu Arrived
#8 Meiji-maru	Katsuura		
Akatsuki	Chikyu		19:30
Shincho-maru	Chikyu		

Personnel @24:00

CDEX	9
MQJ Crew	101
MWJ	15
Scientist	8
MQJ (Other)	1
Telnite	2
Oceaneering	6
SLB Cementing	2
SLB WL	3
Geoservices	6
M-I SWACO	4
SLB Underreamer	2
SLB LWD	2
SLB Seismic	3
AFGlobal	0
ENVENTURE	0
SLB DD	2
Franks	0
Gyrodata	1
Total	167

Mud volume@24:00

Mud Volume (m3)	
KNPP mud (1.39)	394
KNPP (12ppbFracseal)	303
KNPP (30ppbFracseal)	180
KNPP (BAROLIFT)	0
KNP mud (1.13)	270
STOPLOSS(1.37)	47
Slug	5
total	1199

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

Item	Received	Used	Stock
Barite (Bulk)			364,500
Caustic Soda			1,050
Lime			200
Soda Ash			575
Caustic Potash			1,075
Tel-Polymer DX / L / H		100/100/0	540/280/0
XCD-Polymer		50	900
Lignate NC			4,500
Clean Lube W			8,000
Tel Clean W			4,600
Astex-S			4,400
Deformer 30C			512
Tell DD			3,200
Bi-Carbonate			1,000
Citric Acid			2,275
Tan Cal C / M / F			210 / 1,020 / 510
Telnite GXL			684
Treat-HS			9,200
Mud Seal P			130
Tel Plug C / M / F			500 / 500 / 500
Tel Stop P / G			500 / 260
Barolift (lbs)			1,935
Driscal D			0
Tel Flow P			0
Poro Seal			0
Steel Seal 50 (lbs)			1,000
KCl			0
NaCl			0
Fracseal (lbs)			0
Stopseal (lbs)			0
Bentonate(Bulk)			46,000

ROV @24:00

Status	Diving
Last Dive	2/1/2019
Injection Skid	Dive w/135 gal skid

Heli Information @24:00

Flt. No.	Time Arrived	Time Departed	Passenger Are.	Passenger Dept.
1				
2				
3				
4				

Safety (HSE) and other information

Incident	Last Incident	No. LTA
LTA		
HUNS cards	21	

Remarks

Marine Information @24:00

Heave (m)	0.4
Pitch (deg)	0.3
Roll (deg)	0.2
Vessel Heading (deg)	015
Riser Tension (kN)	9750.0
V.D. Load (ton)	12351
Max Draught (m)	9.0
Thruster (kW)	650

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	bc	11.5	18.2	1021.7	9.9	358	11.0	2.2	240	5.9	0.4	316	22.0

Today's Schedule: Continue to POOH to surface. MU&RIH 8-1/2"LWD BHA. Drill 8-1/2"LWD hole.

Reported by : T.Nishiyama / T.Yokoyama

Approved by : T.Saruhashi