Chikyu DAILY MORNING REPORT

Mission No. : CK18-04 **Exp. No. :** Exp 358 **Report No. :** 102

Report Date : 17/Jan/2019

Site Name	C0002	Hole Name	C0002R	Lat.	33° 18.0507'N	Long.	136° 38.2029'E
Seabed Depth :	1,967.5 mBRT	RT-MSL :	28.5 m				
Depth : @24:00	4,880.0 mBRT	2912.5 mbsf	Progress :	0.0 m	Drilling/Coring/Underreaming Hrs. :	0.00 hrs	Last BOP PT: 1/5/19
Next BOP PT: 1/26/19							
Depth : @06:00	4,880.0 mBRT	2912.5 mbsf	LAST CASING : 9-5/8" x 11-3/4" ESET	x	2,850.50 mbsf(4,818.0 mBRT)	Last BOP FT: 1/12/19	Next BOP FT: 1/19/19
Last Glycol 35gal Inj. 1/15/19							

Summary of Operation on 16-Jan : Continue to RIH 9.851" drill out cement assembly. Drill out shoe. PU to liner top. Continue Drill out shoe. Work pipe.

Present Operation @ 06:00 on 17-Jan : Continue work pipe.

Time Breakdown (00:00 - 24:00 on 16-Jan)

mBRT: meter below rotary table

mbsf: meter below sea floor

From	To	Hrs	Code	Depth(mBRT)	Detail of Operation
0:00	4:45	4:45	TRIP	4,880.0	Continue to RIH 9.851" drill out cement assembly from 2,851mBRT to 4,594mBRT.
					Fill the string every 15 stands. Boost riser at 450gpm x 4.1MPa
					At 4,594mBRT, conduct break circulation 150gpm x 3.2MPa then open CMC
4:45	6:30	1:45	TRIP	4,880.0	Continue to RIH 9.851" drill out cement assembly from 4,594mBRT to 4,791mBRT.
					Check Parameter: HK:2,580kN(down)/ 2,700kN(up)
					Wash down from 4,594mBRT w/no rotation and pump 150gpm x 2.9MPa. Tag w/20-30kN at 4604mBRT(at MSL)
					Lowering down from 4,594mBRT w/rotation 5rpm x 3-4kNm and pump 150gpm x 2.9MPa. Confirm pass liner top w/max 50kN. OK
					Continue Lowering w/5rpm x 3-4kNm and 150gpm x 2.9MPa.
					Observe BHA pass 11-3/4" window depth(4,757 to 4,762mBRT) smoothly, OK
6:30	8:00	1:30	CSG	4,880.0	Drill out 9-5/8" x 11-3/4" ESET casing shoe
					From 4,791mBRT to 4,815mBRT w/150gpm x 3.2MPa, 5rpm x 4-7kNm. Tag w/20-30kN at 4,815mBRT.
					For confirming tag depth, reciprocate w/no rotation from 4,811 to 4,815mBRT x 2times. Tag w/50-80kN at 4,815mBRT. 150gpm x 3.2MPa.
					Check Parameter at 4,814mBRT: 600, 700, 800gpm x 17.8, 22.0, 27.0MPa, 15rpm x 11-13kNm, HK:2,750kN(down)/ 2,900kN(up)
					Reciprocate from 4,810 to 4,812.5mBRT x 3times. Observe Tag depth change from 4,815mBRT to 4,812.5mBRT
					Take weight w/20-80kN at 4,812.5mBRT. Milling parameter: 600gpm x 15-16MPa, 10-60rpm x 10-16kNm(Stall >32kNm x 1time)
					For confirming tag depth, lowering from 4,810 to 4,812.5mBRT w/no rotation, no pump. Tag w/40-50kN at 4,812.5mBRT
					Wash down w/no rotation, 150gpm x 2.7MPa. Tag w/40kN at 4,812.5mBRT then rotate w/10rpm x >32kNm(Stall), 600gpm x 15.9MPa
					From 4,809 to 4,813mBRT w/600gpm x 15.2MPa. 10rpm x 13-15kNm. Take weight w/45kN at 4,813mBRT then stall >32kNm
					Pick up to 4,809mBRT. Check parameter w/600gpm x 15.4MPa, 11rpm x 10-13kNm
8:00	9:00	1:00	TRIP	4,880.0	PU to 4,595.8mBRT (above ESET liner top) for check Junk mill condition
					Open CMC, confirm BHA pass liner top smoothly
					Confirm Junk mill free from debris by circulation and pumping. Parameter: 600gpm x 15MPa, 30rpm x 3-6kNm
9:00	11:00	2:00	TRIP	4,880.0	RIH 9.851" drill out cement assembly from 4,595.8mBRT to 4,813mBRT.
					Open CMC and reciprocate liner top area(from 4,595.8 to 4,606.2mBRT) x 2times(w/rotation and w/o rotation) by 600gpm x 15MPa
					Lowering w/rotation: 15rpm x 5kNm w/20-30kN pass to 4,606.2mBRT, OK. Then stop rotation and pick up to 4,600mBRT.
					Lowering w/no rotation: w/40-50kN pass to 4,608.5mBRT. OK
					Continue lowering down from 4,608.5mBRT w/rotation 5rpm x 3-7kNm and pump 150gpm x 3MPa. Not observe any excessive drag, OK
11:00	13:45	2:45	CSG	4,880.0	Drill out 9-5/8" x 11-3/4" ESET casing shoe
					From 4,813mBRT, reaming down w/600gpm x 15MPa, 30rpm x 16-20kNm. Take weight w/50kN at 4,813.5mBRT then stall >33kNm
					Reciprocate from 4,810 to 4,814mBRT x 12times
					Take weight 40kN at 4,814mBRT w/60rpm x 11-16kNm, 600gpm x 15-21MPa. Pump Barolift 5m3
					Continue drill out shoe at 4,814mBRT x12times w/different parameters 5, 20, 30, 50, 60, 80rpm x 11-13.5kNm, 600gpm x 14.7-21MPa.
					Observe drilling break from 4,815 to 4,816mBRT, w/35-60rpm x 10-22kNm, 600, 700, 750gpm x 14.6, 19.6, 21.6MPa
					Suspect 9-5/8" x 11-3/4" ESET casing shoe at 4,815mBRT by increase ROP
					Observe pressure come up suddenly from 21.6 to 24.8MPa w/750gpm at 4,816mBRT, stall same >38kNm. Stop pump and release torque.
13:45	24:00	10:15	OTHER	4,880.0	Work pipe at 4,816mBRT
					Attempt to Jarring x >100times
					Jarring up: Apply 500kN(down) then overpull 700kN(up), after activated jar, continue overpull max 1,500kN (w/o pump)
					When observe jar not activated, back to neutral weight and apply 70rpm x >42kNm(Stall) then continue jarring
					Attempt to pump and confirm able to pump 300gpm x 12MPa, w/o loss
					Attempt to rotate string but no success every 10times jarring.
					Pump lubrication pill 5m3 and locate on BHA depth
					Meanwhile: Conduct function test coring bumper sub at Aux well. Confirm function good.OK. Length for "Balanced": max 1.5m. "Non balanced": max 1.52m

Time Breakdown (00:00 - 06:00 on 17-Jan) * The data on 00:00 - 06:00 is unofficial.

From	To	Hrs.	Code	Depth(mBRT)	Detail of Operation
0:00	6:00	6:00	OTHER(N)	4,880.0	Continue to work pipe at 4,816mBRT
					Attempt to Jarring x >100times
					Jarring up: Apply 500kN(down) then overpull 700kN(up), after activated jar, continue overpull max 1,500kN (w/o pump)
					When observe jar not activated, back to neutral weight and apply 70rpm x >42kNm(Stall) then continue jarring
					Jarring down: Apply 200kN(up) then 600kN(down), w/o pump
					Attempt to rotate string but no success every 10times jarring. Observe no loss
					Backloading items: Receive Econo wrap from Shingubase by Shincho-maru.
					Prepare bundling for purchased 9-5/8"ESET 19jts(including anchor joint), 48jts on Econo wrap(Done), total 67 jts on deck.

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

BHA Record @24:00

22	9.851" DO BHA	9.851"Junk Mill x Bit Sub w/ non ported float x XO#1 x 6-3/4" DC (4-1/2"IF 3stds) x 6-1/2" jar x 6-3/4" DC (4-1/2"IF 2jt) x XO#2 x Churchill Drift Sub x 5" DP S-140 (12stds) x 5-1/2" DP S-140 (22 stds) x XO#3 x 5-1/2" DP S-150 (70 stds) x XO#4 x 6-5/8" DP Z140 (12stds) x 6-5/8" DP UD-165

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	6:00	4,748	1.39	64	25	27	10	9 / 18	7.0	1.1	9.8	0.1	120,700	0.20		19.0	2.25	10	8	20,900	0.45	2.70	6.40	-	-

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"	70	350	21.0	74	59
2	6"	70	350			
3	6"(Booster)	90	450			

Geologic Information @24:00

From	To	Lithology of cuttings

Shale Shaker / Centrifuge @24:00

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

Materials Stock on Board @24:00

Item	Unit	Stock	Used	Received
Fresh Water	m3	271.2	75.6	0.0
Potable Water	m3	330.9	6.6	96.8
Drill Water	m3	1,200.7	20.1	0.0
Fuel	m3	4,294.4	46.9	0.0
Lube, Oil	Ltrs	79,000	1,000.0	0.0
Heli Fuel	Ltrs	0.0	0.0	0.0
Cement "GWC"	ton	161.9	24.1	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	Chikyu		
Akatsuki	Chikyu		
Shincho-maru	Chikyu		19:25

Personnel @24:00

CDEX	10
MQJ Crew	101
MWJ	15
Scientist	4
Telnite	2
Oceaneering	6
SLB Cementing	3
SLB WL	0
Geoservices	6
M-I SWACO	4
SLB Underreamer	2
SLB LWD	2
SLB Seismic	0
AFGlobal	2
ENVENTURE	1
SLB DD	1
Franks	2
Total	161

Mud volume@24:00

Mud Volume (m3)	
KNPP mud (1.39)	427
KNPP (Fracseal)	198
KNPP (BAROLIFT)	40
KNP mud (1.33)	47
KNP mud (1.13)	165
STOPLOSS(1.37)	54
Slug mud (1.70)	9
total	940

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

Item	Received	Used	Stock
Barite (Bulk)		500	384,500
Caustic Soda			1,200
Lime			200
Soda Ash			475
Caustic Potash			1,275
Tel-Polymer DX / L / H			1,560 / 1,940 / 0
XCD-Polymer			675
Lignate NC			4,500
Clean Lube W			0
Tel Clean W		1,200	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			7,000
Fracseal (lbs)			8,000
Stopseal (lbs)			0
Bentonate(Bulk)			46,000

Hook Wt. (knt) @24:00 4,816.0 mBRT

Hook Load	2,900
BHA	130
Below DC	-
below Jar	120
HPS & Traveling block	620
Hook + RRT	-
Hook block	-

Jar Rotating time 2nd S/N:

Today	Total	hrs

Cutting skip @24:00

Empty	Full	Total
55	0	55

ROV @24:00

Status	Dive
Last Dive	1/14/19
Injection Skid	Dive w/135 gal skid

Heli Information @24:00

Flt. No.	Time Arrived	Time Departed	Passenger Are.	Passenger Dept.
1	9:15	9:25	9	9
2	11:25	11:35	9	9
3	13:35	13:45	4	7
4				

Safety (HSE) and other information

Incident	Last Incident	No. LTA
LTA		
HUNS cards	22	

Remarks

Marine Information @24:00

Heave (m)	0.6
Pitch (deg)	0.3
Roll (deg)	0.2
Vessel Heading (deg)	320
Riser Tension (kN)	9750.0
V.D. Load (ton)	13301
Max Draught (m)	9.0
Thruster (kW)	850

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	9.0	17.2	1018.6	10.1	317	12.6	1.5	250	5.3	0.2	238	22.0

Today's Schedule: Continue to work pipe at 4,816mBRT. Slip and cut.

Reported by : A. Suzuki / N.Sakurai

Approved by : T.Saruhashi