

**Chikyu DAILY MORNING REPORT**

Mission No. : **CK18-04**

Exp. No. : **Exp 358**

Report No. : **61**

Site Name	C0002	Hole Name	C0002Q	Lat	33° 18.0507' N	Long	136° 38.2029' E	Seabed Depth	1,967.5 mBRT	RT-MSL	28.5 m	Report Date	7/Dec/2018
Depth @ 24:00	5,197.0 mBRT	3229.5 mbsf		Progress	37.0 m	Drilling/Coning/Undersreaming Hrs.	21.50 hrs	Last BOP PT:	11/15/2018	Next BOP PT:	12/6/2018		
Depth @ 06:00	5,209.0 mBRT	3241.5 mbsf		LAST CASING	11-3/4" x 2,922.50 mbsf (4,890.0 mBRT)			Last BOP FT:	11/29/2018	Last BOP FT:	12/6/2018		
Summary of Operation on	6-Dec	Cont. to drill from 5,160mBRT to 5,197mBRT											
Present Operation @ 06:00	7-Dec	Cont. to drill 8-1/2" x 12-1/4" hole to 5,209mBRT.											
Time Breakdown (00:00 - 24:00 on	6-Dec	Last Glycol 35gal Inj. 12/4/2018 mBRT: meter below rotary table mbsf: meter below sea floor											

From	To	Hrs	Code	Depth(mBRT)	Detail of Operation
0:00	0:30	0:30	RR	5,160.0	Change Mud Pump line up into the hole. Find #1 Mud Pump leak by dropping standpipe pressure. Pick up string to 2m off bottom, and stop pump 5min to arrange mud pump line up (#2 & #3 Mud Pump into string). Find No. 2 & 3 piston of #1 Mud Pump damaged and replace all pistons (No.1 piston is also slightly damaged).
0:30	1:00	0:30	DRL	5,160.5	Run back to bottom and drill down 8-1/2" x 12-1/4" hole from 5,160mBRT to 5,160.5mBRT. WOB: 70-80kN, HPS: 160rpm x 18-26kN, MP: 625gpm x 20.9MPa
1:00	1:30	0:30	OTHER(N)	5,160.5	Find "Auto Driller" mode failed due to drawworks mismatch. Pick up string to 11-12m hook position w/60rpm x 20-21kNm and 625gpm x 21.2MPa. Attempt to calibrate drawworks and hook height, but fail the calibration. Resume drill down by manual. (0:00 - 01:30) Stop booster line (MP#1).
1:30	3:45	2:15	DRL	5,165.0	Drill 8-1/2" x 12-1/4" hole from 5,160.5mBRT to 5,165mBRT (Manual drilling) WOB: 70-100kN, HPS: 160rpm x 15-33kNm, MP: 625gpm x 20.7MPa, Downhole WOB: 30-80kN, Downhole torque: 0.5-1.0kNm, ECD 1.417-1.419sg Ave. ROP 2.0 m/hr Pump 3m3 12ppb fracseal every 1 hour from 2:00. Observe standpipe pressure dropped from 21.2MPa to 20.1MPa by unplugged nozzle (Confirm no surface equipment leak)
3:45	4:45	1:00	OTHER	5,165.0	Take a survey at 5,162mBRT and calibrate Downhole Torque and WOB. 1st survey fails due to the bad signal and 2nd survey get good signal. Calibrate Downhole Torque and WOB (#2 & #3 Mud Pump to string). Change line up of #1 & #2 Mud Pump to string. Calibrate Downhole Torque and WOB again due to the change of Mud pump line up (#1 & #2 Mud Pump to string)
4:45	5:15	0:30	OTHER	5,165.0	NSD connection. Calibrate DW mismatch by adjusting hook position.
5:15	12:30	7:15	DRL	5,177.0	Drill 8-1/2" x 12-1/4" hole from 5,165mBRT to 5,177mBRT. WOB: 100-140kN, HPS: 160rpm x 16-33kNm, MP: 625gpm x 20.8MPa, Downhole WOB: 25-55kN, Downhole torque: 0.8-1.2kNm, ECD 1.418-1.420sg Ave. ROP 1.7 m/hr Observe CMC going up from (0.5m-0.9m) 5,167mBRT and ROP is decreased.
12:30	24:00	11:30	DRL	5,197.0	Drill 8-1/2" x 12-1/4" hole from 5,177mBRT to 5,197mBRT. WOB: 90-130kN, HPS: 160rpm x 15-33kNm, MP: 625gpm x 19.9MPa, Downhole WOB: 20-60kN, Downhole torque: 0.0kNm, ECD 1.412-1.420sg Ave. ROP 1.7 m/hr WOB decrease gradually from 5,177mBRT and observe severe shock by bouncing on LWD monitoring. Pick up string to mitigate bouncing and resume drilling. Confirm no shock observed. Downhole torque decrease after resume drilling. Pump 3m3 and 5m3 of 12ppb fracseal alternately. Change shale shaker bottom screen to API100 (Front) & API120 (Back).  (2:20 - 03:30) "Advisory" status by maintenance work for 1P generator. Max. ROP: 4.52 m/hr @ 5,177.5 mBRT, min ROP: 0.99 m/hr @ 5,170.5mBRT.  Offline Activities - Work fracseal recovery at cuttings settling tank. - Ditch magnet: 4.0kg (Total 162.8kg)

From	To	Hrs	Code	Depth(mBRT)	Detail of Operation
0:00	2:30	2:30	DRL	5,205.0	Continue to drill 8-1/2"x12-1/4" hole from 5,197mBRT to 5,205mBRT. WOB: 100-130kN, HPS: 160rpm x 16-33kNm, MP: 625gpm x 20.4MPa, Downhole WOB: 30-75kN, Downhole torque: 0.0kNm, ECD 1.412-1.413sg Ave. ROP 3.2 m/hr From 5,200.5mBRT to 5,201mBRT, WOB: 85-110kN, HPS: 160rpm x 20-33kNm, 625gpm x 20.2MPa. From 5,201.5mBRT to 5,201mBRT, WOB: 50-90kN, HPS: 160rpm x 19-33kNm, 625gpm x 20.4MPa. From 5,201.5mBRT to 5,201mBRT, WOB: 50-90kN, HPS: 160rpm x 19-33kNm, 625gpm x 20.4MPa. Pump 3m3 and 5m3 of 12ppb fracseal alternately.
2:30	4:00	1:30	OTHER	5,205.0	Take survey and calibrate Downhole Torque and WOB. (03:00-03:45) Make a NSD stand connection.
4:00	6:00	2:00	DRL	5,209.0	Drill 8-1/2" x 12-1/4" hole from 5,205mBRT to 5,209mBRT. WOB: 60-100kN, HPS: 160rpm x 18-33kNm, MP: 625gpm x 20.4MPa, Downhole WOB: 20-50kN, Downhole torque: 0.0-1.0kNm, ECD 1.412-1.414sg Ave. ROP 2.9 m/hr From 5,208mBRT to 5,209mBRT, WOB: 50-75kN, HPS: 160rpm x 18-33kNm, 625gpm x 20.3MPa. Pump 3m3 and 5m3 of 12ppb fracseal alternately.

Bit	Size	MFR	Type	IADC Code	S/No.	Nozzles	Depth (mBRT)	Meter-agg	Hrs.	WOB (kN)	rpm	Total Rev.	ROP (m/hr)	Inner	Outer	Dull	Loc.	B	G	O.D.	RP		
RR46	8.5	Smith	vestalide X614	M23	QF3233	3x12/12 3x13/12	4,990.0 : 5,197.0	207.0	81.81	100	145	110	160	735.3	2.5								
RR46	8.5 x 12.25	Dallstar	Z-Reamer850	NA	52763	1x 17/32 2x 8/32	4894.00 : 5,168.00	274.0	141.24	75	110	90	160	840.3	1.9								

Bit Record @24:00	Hook WL (knt) @24:00	5,197.0 mBRT
#13 8.5"x12.25"-18-1/2" Bit sub w/in-ported x XO x arc/Vision675 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 (11) x XO x 6-3/4"Coning DC (3) x XO x 8-1/2"DC (3) x 8"Jar x 8-1/2"DC (3) x XO x 5.68"HWDP (360) x XO	Hook Load	3,250
	BHA	360
	Below HWDP	290
	below Jar	230
	HPS & Traveling block	620
	Hook & RRT	-
	Hook block	-
	Jar Rotating time 24/S/N:	1762-5074
	Today	20.49
	Full	164.24
	hrs	

Mud Type	Time	Depth (mBRT)	MW	Vis	PV	YV	6rpm	Gel St. (10 <sup>3</sup> , 10 <sup>2</sup> )	API	Cake	pH	PI	Cl-	Sand	Oil	Solid	MBC	Temp. In	Temp. Out	K+	n	K	LGS	FIT 20/40 (mm) 0 min : 5min	
KNPP	2:00	5,161	137	71	25	38	15	14	22	4.5	0.8	9.9	0.1	135.00	0.60	17.5	1.50	11	8	22.000	0.44	3.36	4.10	14	-
KNPP	06:00	5,169	137	67	25	35	13	13	21	4.5	0.8	9.9	0.1	135.00	0.60	17.5	1.50	11	8	22.000	0.42	3.84	4.10	16	-
KNPP	14:30	5,180	137	68	24	35	14	13	21	4.7	0.8	9.9	0.1	135.00	0.60	17.5	1.50	11	8	22.000	0.44	3.15	4.10	14	-

Mud Pump	14-9-220	5.00	Water/airflow	98%	
Personnel @24:00					
No.	Lineer Size	SPM	GPM	Press. (MPa)	Ann. Vel. (m/min)
1	6"	63	315	19.9	5.978
2	6"	62	310		
3	6"(Booster)	90	450		55 68

Geologic Information @24:00				
From	To	Lithology of cuttings		
5100.0	5160.0	Claystone (55-70%), Silty Claystone (30-40%), Sandstone (0-8)		
5160.0	5190.0	Claystone (70-80%), Silty Claystone (20-30%), Sandstone (tr)		

Shale Shaker @24:00					
No.	Lineer Size	SPM	GPM	Press. (MPa)	Ann. Vel. (m/min)
No.1	20, 100x120	No.4	30, 100x120	No.1	off
No.2	20, 100x120	No.5	30, 100x120	No.2	off
No.3	20, 100x120	No.6	20, 100x120	No.3	off

Materials Stock on Board @24:00				
Item	Unit	Stock	Used	Received
Fresh Water	m3	311.8	104.6	101.4
Potable Water	m3	241.6	6.4	0.0
Drill Water	m3	1,660.0	11.0	0.0
Fuel	m3	6,290.2	55.4	0.0
Lube Oil	Ltrs	100,700	4,200.0	0.0
Heli Fuel	Ltrs	0.0	0.0	0.0
Cement "GWC"	ton	186.0	0.0	0.0
Cement "G"	ton	97.0	0.0	0.0

Boat Information @24:00				
Boat Name	Status	Time @Chikyu		
#8 Meiji-maru	NE Smile	Departed	Arrived	
Akatsuki	Chikyu			
Shincho-maru	Chikyu		20:00	

Weather Information				
Time	Weather	Temp. (degC)	Barometer (hPa)	Wind (m/s)
24:00	o	18.5	1014.9	2.5
				107
				3.3

Today's Schedule: Cont. Drill 8-1/2"x12-1/4" hole to 5,300mBRT. POOH, BOP test.

Approved by : T. Ikawa