

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 Report Date: 26/Dec/2018  
 Depth: @24:00 4,837.5 mBRT 2870.0 mbsf Progress: 27.9 m Drilling/Coring/Underreaming Hrs.: 6.25 hrs Last BOP PT: 12/14/2018  
 Depth: @06:00 4,843.0 mBRT 2875.5 mbsf LAST CASING: 11-3/4" x 2,922.50 mbsf 4,890.0 mBRT Last BOP FT: 12/22/2018  
 Summary of Operation on 25-Dec: Ream down to 4,809.5mBRT. Take surveys. Drill 8-1/2" kick off hole from 4,809.6mBRT to 4,837.5mBRT.  
 Present Operation @ 06:00 on 26-Dec: Reaming down at 4,834mBRT.  
 Time Breakdown (00:00 - 24:00) on 25-Dec: mBRT: meter below rotary table mbsf: meter below sea floor

From	To	Hrs	Code	Remarks	Detail of Operation
0:00	1:45	1:45	C&C	4,809.6	Continue to circulation and bottoms up. Circulate well w/reciprocating the string w/500gpm x 17MPa. Boost riser at 450gpm x 4.0MPa. 10rpm x 8-10kNm. Keep monitoring cuttings volume, volume become less <7cm. OK. Take SCR at 4.74mBRT.
1:45	2:15	0:30	OTHER	4,809.6	Ream down from 4.75mBRT to 4.78mBRT.
2:15	9:45	7:30	W&R	4,809.6	Wash down from 4.78mBRT to 4.78mBRT. Pump 3m3 of Fracseal sweep every 1 hour (boost riser 450gpm x 4.7MPa on Booster line). Wash down from 4.750mBRT to 4.763mBRT. Take weight <50kN and increasing pump pressure at 4.761mBRT. Ream down from 4.763mBRT to 4.783mBRT with varying parameters. Parameter: PUMP:100, 150, 200, 250, 300, 350gpm x 2.9, 3.8, 4.5, 7.5, 9.6MPa, HPS: 5, 10, 20, 30rpm x 8-13kNm (motor: 28-38rpm). Take weight <50kN and observe pressure increase by 1.0MPa at 4.783mBRT. Attempt to pass multiple time - no success. Rotate the string 1/4 turn and attempt to pass 4.782mBRT multiple times - no success.
9:45	13:45	4:00	W&R	4,809.6	Ream down from 4.783mBRT to 4,809.5mBRT. Increase parameters: 0-50kN, 350gpm, 9.5MPa, 50rpm, 11-14kNm. Stall the string at 4,800mBRT. Overpull 150kN and string released. Change parameters from 4,800mBRT: 0-50kN, 350gpm x 10.1MPa, 30rpm x 11-14kNm. Observe HPS torque and standpipe pressure (to 11.9MPa) increased at 4,801mBRT, and stall HPS at the same time. Release from stall by overpull 400kN. Resume ream down to 4,806.5mBRT. Parameters: 0-50kN, 350-400gpm x 11-12.6MPa, 30rpm x 10-14kNm. Observe HPS torque and standpipe pressure (to 14MPa) increased at 4,807mBRT, and stall HPS at the same time. Reduce flow rate to 350gpm x 11.5MP and release from stall by overpull 150kN. Resume ream down to 4,809mBRT. Parameters: 0-90kN, 400gpm x 13.3MPa, 30rpm x 11-13kNm. Pump 3m3 of Fracseal sweep every 1 hour (boost riser 450gpm x 4.3MPa on Booster line).
13:45	14:45	1:00	OTHER	4,809.6	Take a survey at 4,806.5mBRT. Attempt to take a survey by rotation on/off, but fail 1st and 2nd trials. Try to take a survey by reducing flow rate to 300gpm not to take a signal by Telescope. Success.
14:45	16:30	1:45	W&R	4,809.6	Wipe the string every surveys to check the hole condition. PU string to prepare sliding operation and run back to 4,809.5mBRT. Parameters: 0-50kN, 400gpm x 3.5MPa, 50rpm x 11-15kNm. Observe take weight 50kN at 4,804mBRT, and 4,805mBRT, 60kN at 4,802mBRT and 80kN at 4,808mBRT. Pump 3m3 of BAROLIFT.
16:30	16:45	0:15	DRL	4,811.5	Drill 8-1/2" kick off assembly from 4,809.5mBRT to 4,811.5mBRT. Parameters: 0-90kN, 450gpm x 16.5MPa, 50rpm x 11-16kNm. Pump and sweep 3m3 of Fracseal, (boost riser 450gpm x 4.4MPa on Booster line).
16:45	18:00	1:15	W&R	4,811.5	PU string to prepare sliding operation and run back to 4,811.5mBRT. Attempt to run back to bottom, but observe take weight 115kN at 4,807mBRT. Find GTF does not function while run back to bottom. Ream down from 4,806mBRT to 4,811.9mBRT. Parameters: 0-40kN, 450gpm x 15MPa, 50rpm x 10-22kNm. Pump 3m3 of Fracseal sweep every 1 hour (boost riser 450gpm x 4.3MPa on Booster line).
18:00	19:45	1:45	DRL	4,819.0	Drill 8-1/2" Kick off assembly from 4,811.5mBRT to 4,819mBRT. Parameters: 0-90kN, 480gpm x 18.5MPa, 50rpm x 12-16kNm. Pump 3m3 of Fracseal sweep every 1 hour (boost riser 450gpm x 4.3MPa on Booster line). Observe torque increasing gradually, and stall the string at 4,815mBRT. Overpull 300kN and string released. Observe torque increasing gradually, and stall the string at 4,812mBRT and 4,818mBRT. Pick up string with 60kN and string released. Observe no stall once reduce flow rate to 350gpm x 10.6MPa. Increase flow rate to 450gpm x 15MPa while wipe the single.
19:45	20:30	0:45	OTHER	4,819.0	Take a survey at 4,818mBRT. Reduce flow rate to 200gpm not to take a signal by Telescope and back to 500gpm after a few minutes (1st trial: failed).
20:30	21:15	0:45	DRL	4,826.0	Drill 8-1/2" Kick off assembly from 4,819mBRT to 4,826mBRT. Parameters: 0-90kN, 350gpm x 12.9MPa, 50rpm x 12-21kNm. Pump and sweep 3m3 of Fracseal (boost riser 450gpm x 4.4MPa on Booster line).
21:15	21:30	0:15	OTHER	4,826.0	Take a survey at 4,825mBRT. Reduce flow rate to 200gpm not to take a signal by Telescope and back to 500gpm after a few minutes.
21:30	22:30	1:00	DRL	4,829.0	Sliding 8-1/2" Kick off assembly from 4,826mBRT to 4,829mBRT. Parameters: 0-90kN, 350-400-450gpm x 11.6-13.5-16.5MPa (Motor: 98-112-126rpm). Adjust GTF between -30 and 30deg. Observe CMC comes up to 1.9m at 4,828mBRT. Pick up string to 4,825mBRT and observe overpull 250kN.
22:30	23:15	0:45	W&R	4,829.0	Work pipe and wipe from 4,818mBRT to 4,828mBRT. Release string by overpull 400kN. Wipe the string with 400gpm x 12.6MPa, 30-50rpm x 10-15kNm.
23:15	23:30	0:15	DRL	4,831.5	Drill 8-1/2" Kick off assembly from 4,829mBRT to 4,831.5mBRT. Parameters: 0-90kN, 400gpm x 13.5MPa, 50rpm x 10-21kNm.
23:30	24:00	0:30	DRL	4,837.5	Sliding 8-1/2" Kick off assembly from 4,831.5mBRT to 4,837.5mBRT, on going. Parameters: 0-100kN, 450gpm x 16.5MPa (Motor: 126rpm). Pump and sweep 3m3 of Fracseal (boost riser 450gpm x 4.4MPa on Booster line).
-Offline-					
Conduct function test for new Torque wrench for tubing, Ongoing Ditch magnet: 14kg (Total 62.5kg for Kick off hole)					

Time Breakdown (00:00 - 06:00) on 26-Dec: \* The data on 00:00 - 06:00 is unofficial.

From	To	Hrs	Code	Remarks	Detail of Operation
0:00	0:15	0:15	DRL	4,838.0	Continue drilling 8-1/2" Kick off hole from 4,837.5mBRT to 4,842mBRT. (00:00-00:15) 4,837.5-4,839mBRT: Sliding Parameters: 0-100kN, 450gpm x 16.5MPa (Motor: 126rpm). (00:15-01:00) 4,839-4,839mBRT: Rotating Parameters: 80-100kN, 450gpm x 15-16MPa, 30-50rpm x 11-13kNm. (01:00-02:30) 4,839-4,842mBRT: Sliding Parameters: 80-100kN, 450gpm x 15-16MPa, 30-50rpm x 11-13kNm.
2:30	3:00	0:30	SP	4,842.0	Pick up the string and attempt to rotate - string stalled. Overpull 300kN and the string released. Reciprocate the string 4,839-4,839mBRT until torque stabilized.
3:00	3:30	0:30	DRL	4,843.0	Drill 8-1/2" Kick off hole from 4,842mBRT to 4,843mBRT.
3:30	4:15	0:45	SP	4,843.0	Observe increasing torque from 12-30kNm to 45kNm. Apply overpull 500kN and slack off 300kN to fire for multiple times - the string released. Backream from 4,843mBRT to 4,824mBRT.
4:15	6:00	1:45	W&R	4,843.0	Ream down from 4,824mBRT to 4,834mBRT. Observe increasing torque 14-30kNm and pump pressure 10-12MPa at 4,834mBRT. Meijimaru arrives at location at 2:00.

Bit Record @24:00

Bit No.	Size (in)	MFR	Type	IADC Code	S.No.	Nozzles	Depth (mBRT)	Meter-age	Hrs.	WOB (kN)	rpm	Total Rev.	ROP (m/hr)	Inner	Outer	Dull	Loc.	B	G	O.D.	RP	
8	8.5	Smith	FWAC200VPS	527X	RG2023	3x16/32"	4,772.0	4,837.5	65.5	9.89	0	100	0	50	109.00	6.6						

BHA Record @24:00

#	Size	Description	Hook Wt. (knt) @24:00	4,837.5 mBRT
#16	28-1/2"	Bit x 875XP PDM with 1.15" bent x 8-1/8" Slab (SLB) x Fibra Sub w Non-corporated float valve (SLB) x 6-3/4" Poly NMDC x XO #1 x Telescope 675 x XO #2 x 6-3/4" NMDC x 6-3/4" DC (3 stds) x BHA	2,791	
	16-1/2"	Jar x 6-3/4" DC (2 lbs) x XO #3 x 5.88" HWDP (3 stds) x XO #4 x 5-1/2" DP S-140 (25 stds) x XO #5 x 5-1/2" DP S-150 (85 stds) x XO #6 x 6-5/8" DP Z-140 (22 stds) x 6-5/8" DP UD-165	180	
			250	
			125	
			615	

Mud Properties @24:00

Mud Type	Time	Depth (mBRT)	MW (g/cc)	Vis (cP)	PV (10 <sup>3</sup> cP)	YV (10 <sup>3</sup> cP)	Grm	Get Sl (10 <sup>3</sup> g)	API	Calc	pH	Cl-	Sand	Oil	Solid	MBC	Temp (°C)	K+	n	K	LGS	FTT 2040 (mm)	
KNPP	1:30	4,744	1.39	85	24	32	12	11	18	6.1	10.0	0.1	117.000	0.20	18.0	1.50	12	10	22,000	0.40	3.89	4.80	-
KNPP	20:00	4,806	1.39	85	24	33	12	11	19	6.5	10.0	0.1	124.000	0.20	18.0	1.75	11	10	22,000	0.40	3.89	4.40	-

Mud Properties 14-P-220

No.	Liner Size	SPM	GPM	Press. (MPa)	Ann. Vel. (m/min)
1	6"	48	240		5.970
2	6"	48	240	18.5	51
3	6"(Booster)	90	450		40

Geologic Information @24:00

From	To	Lithology of cuttings

Shale Shaker @24:00

No.1	No.2	No.3	No.4	No.5	No.6	No.7	No.8	No.9	No.10	Centrifuge:0 hrs

Materials Stock on Board @24:00

Item	Unit	Stock	Used	Received
Fresh Water	m <sup>3</sup>	270.0	94.4	97.4
Potable Water	m <sup>3</sup>	223.5	6.5	0.0
Drill Water	m <sup>3</sup>	1,525.0	24.0	0.0
Fuel	liters	5,361.6	47.9	0.0
Lube Oil	Ltrs	89,500	900.0	0.0
Hell 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

Mud volume @24:00

Item	Volume (m <sup>3</sup> )
KNPP mud (1.37)	268
Slug mud	9
KNPP mud (1.13)	145
STOPOSS (1.27)	47
KNP mud (1.19)	53
KNPP mud (1.39)	234
total	758

Boat Information @24:00

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

Weather Information

Time	Weather	Temp. (degC)	Barometer (hPa)	Wind (kts)	Wave (ft)	Current (kts)	Visibility (km)
24:00	bc	14.0	1022.0	6.5	2.0	1.0	2.0

Today's Schedule: Drill 8-1/2" kick off hole.