

**Chikyu DAILY MORNING REPORT**

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

Report No.: **139**

Site Name	C0002	Hole Name	C0002T	Lat.	33° 18.0507'N	Long	136° 38.2029'E	Seabed Depth	1,967.5 mBRT	RT.ASL	28.5 m	Report Date	23/Feb/2019
Depth @ 24:00	4,816.0 mBRT	2848.5 mbsf	2848.5 mbsf	Progress	0.0 m	Drilling/Coring/Underreaming	Hrs. 0.00	Last BOP PT	1/28/2019	Next BOP PT	2/22/2019		
Depth @ 06:00	4,816.0 mBRT	2848.5 mbsf	2848.5 mbsf	LAST CASING	9.58" x 11.34" ESEK	2,802.50 mbsf	4,770.0 mBRT	Last BOP FT	2/14/2019	Next BOP FT	2/22/2019		
Summary of Operation on 22-Feb : #1 plug back cementing. Wait on cement. Wash down to 4,747mBRT. Circulate and bottoms up.													
Present Operation @ 06:00 on 23-Feb : Circulating bottom up.													
Time Breakdown ( 00:00 - 24:00 on 22-Feb )													

From	To	Hrs	Code	Depth(mbsf)	Detail of Operation
0:00	2:45	2:45	P & A	4,816.0	Conduct #1 plug back cementing at 4,780mBRT. Lay out single and make up Side Entry Sub (SES) assembly. Install cement hose with lo-torc valve on SES. Hold TBRA. Displace surface line with 2.2m <sup>3</sup> (13.8bbl) of 1.60sg Mud push II spacer and 0.6m <sup>3</sup> (4.2bbl) of 1.35sg mud using rig pump. Close FOSV above SES. Apply 3.5MPa above FOSV. Locate bottom of diverter at 4,780mBRT. Open lower lo-torc valve. Pump 8.0m <sup>3</sup> (50bbl) of 1.60sg Mud push II spacer from cement unit at 4.0bpm. Pump 7.7m <sup>3</sup> (48.4bbl) of 1.90sg G cement slurry from cement unit at 4.0-4.5bpm. Flush surface line from cement unit with 0.25m <sup>3</sup> (1.6bbl) of 1.60sg Mud push II spacer. Close lo-torc valve and open FOSV. Displace cement with 48.2m <sup>3</sup> (303bbl) (2,554stks. including spacer volume in surface line) of 1.35sg mud at 500gpm using rig pump. Reduce flow rate from 500gpm to 125gpm in last 2.6m. No losses through cementing operation. Estimated TOC at 4,630mBRT. Rig up DT135 manual tong in rig floor while cementing operation.
2:45	4:00	1:15	TRIP	4,816.0	Rack back SES stand in derrick. POOH diverter at 9.1m/min from 4,780mBRT to 4,550mBRT (80m above planned TOC). No flow back from the string.
4:00	7:00	3:00	C&C	4,816.0	Drop sponge ball in string. Circulate 1x bottom up at 800gpm / 15.6MPa. Start boosting riser at 450gpm after finish bottoms up below wellhead. Reciprocate string at 4,530-4,550mBRT with 5rpm. Reduce flow rate from 800gpm to 300gpm to monitor cement return at surface. Observe maximum pH of 11.7 and 1.36sg return mud at surface after 486m <sup>3</sup> pumped, then both decreasing trend. No pure cement returns. Total 510m <sup>3</sup> pumped.
7:00	13:15	6:15	CMT	4,816.0	Wait on cement. Concurrently POOH diverter assembly from 4,550mBRT to 3,709mBRT to confirm any over torqued connection - find 1x over torqued connection (6-5/8" Z-140 connection between S/N: 14081 box x 14051 pin) at 3,709mBRT. Use DT135 manual tong and break the connection at 167kNm. Run back to 4,594mBRT.
13:15	14:15	1:00	W&R	4,816.0	Wash down from 4,594mBRT to 4,747mBRT. Pump w/100-200gpm x 0.8MPa (Pressure is low due to slug mud inside drill pipe). Observe no parameter changes of WOB and Standpipe pressure while washing down to 4,747mBRT (Estimated TOC: 4,630mBRT). Three surface cement samples had not been hardened completely.
14:15	15:15	1:00	TRIP	4,816.0	Pick up and pump out string to 4,629mBRT. Pump out w/300-400-500-600-700gpm x 1.6-3.4-3.8-9.5-12.0MPa. One of cement sample harden, but others are still not hardened.
15:15	18:00	2:45	C&C	4,816.0	Circulate and bottoms up to monitor if cement returns to shaker. Pump w/800gpm x 15.5-16.0MPa. Monitor returns: Observe contaminated cement (Like gel) at shakers. Two soft cement samples had not been hardened yet.
18:00	18:45	0:45	W&R	4,816.0	Wash down to 4,747mBRT. Pump w/200gpm x 2.2-3.0MPa. Observe no obstacles while washing down.
18:45	24:00	5:15	C&C	4,816.0	Circulate and bottoms up during wait on cement. Pump w/800gpm x 15.5MPa. Observe no cement and no contaminated cement at shakers (Observe fine cuttings only). Two soft cement samples become hard gradually, but do not become dry conditions.
<Offline>					
Retrieve BOP pressure logger data by ROV. MU WBRTT w/XOs and 6m pup at core tech workshop. Prepare riser / BOP recovery. Mix inhibited mud and spacer for plug back cementing job #2. Continue to repair iron roughneck #B and investigate iron roughneck #A malfunction (Since 15th of Feb (#A), 13th of Feb (#B)). Iron roughneck #A: Under investigation Iron roughneck #B: Continue to investigate eccentricity problem. Install flow reducer at upstream of booster pump and test iron roughneck by adjusting flow rate to jaw cylinders. Find iron roughneck works well when reduce the flow. Suspect sequence valve's malfunction (Sequence valve: To allow booster pump to flow to jaw cylinders once jaws bite a pipe). Disassemble sequence valve from iron roughneck and check same. Function test UWTV winch - Standby UWTV for repeatability test to check the problematic point (Resume the test on 23rd Feb). No loss/gain in 24hrs Ditch magnet: 0.0kg (8.5in hole total: 14.0kg)					

Time Breakdown (00:00 - 06:00 on 23-Feb) \* The data on 00:00 - 06:00 is unofficial.

From	To	Hrs	Code	Depth(mbsf)	Detail of Operation
0:00	0:30	0:30	C&C	4,816.0	Continue circulating and bottoms up during wait on cement.
0:30	1:15	0:45	W&R	4,816.0	Ream down from 4,747mBRT to 4,785mBRT. Take weight at 4,785mBRT with 10kN down and torque increase 8--10kNm.
1:15	2:30	1:15	P & A	4,816.0	Prepare for cementing operation. Make up Side Entry Sub (SES) stand with 2x FOSV and 1x SES.
2:30	5:00	2:30	P & A	4,816.0	Conduct #2 plug back cementing at 4,780mBRT. Locate bottom of diverter at 4,780mBRT. Displace surface line with 2.2m <sup>3</sup> (13.8bbl) of 1.60sg Mud push II spacer and 0.6m <sup>3</sup> (4.2bbl) of 1.35sg mud using rig pump. Close upper FOSV. Insert foam ball above lower FOSV. Apply 3.5MPa above upper FOSV. Open lower lo-torc valve. Pump 8.0m <sup>3</sup> (50bbl) of 1.60sg Mud push II spacer from cement unit at 4.5bpm. Remove cement hose. Insert foam ball below SES. Pump 7.7m <sup>3</sup> (48.4bbl) of 1.90sg G cement slurry from cement unit at 4.5bpm. Flush surface line from cement unit with 0.25m <sup>3</sup> (1.6bbl) of 1.60sg Mud push II spacer. Close lo-torc valve and open upper and lower FOSV. Displace cement with 48.2m <sup>3</sup> (303bbl) (2,554stks. including spacer volume in surface line) of 1.35sg mud at 500gpm using rig pump. Observe pressure increase after 35.0m <sup>3</sup> (220bbl) pumped, indicating spacer enters annulus. Pressure jump up 3.2--4.5MPa after 39.3m <sup>3</sup> (247bbl) pumped, might be possible plugging foam ball at diverter. Reduce flow rate from 500gpm to 125gpm in last 2.6m. No losses through cementing operation. Estimated TOC at 4,630mBRT. Rack back SES stand in derrick. POOH diverter at 9.1m/min from 4,780mBRT to 4,550mBRT (80m above planned TOC). The string pulled wet.

Bit No.	Size (in)	MFR	Type	IADC Code	S/No.	Nozzles	Depth (mBRT)	Meterage	Hrs.	WOB (kN)	rpm	Total Rev. (krev)	ROP (m/hr)	Inner	Outer	Dull	Loc.	B	G	O.D.	RP
							From : To			Min. Max.	Min. Max.										

BHA Record @24:00		Hook Wt. (knt) @24:00	
32	Diverter	4,720.0	2,908

Mud Properties @24:00		Jar Rotating time 24/S/N:	
Mud Type	Time	Depth (mBRT)	Today Total hrs
KNPP	1:00	1.35	59
KNPP	14:00	4.700	1.35
Hi-Vis	1:35	300	40

Mud Pumps - 14-P-220		Personnel @24:00		Mud Materials on Board @24:00hrs (unit: kg)	
No.	Lineer Size	SPM	GPM	Item	Received
1	6"	80	400	CDEX	6
2	6"	80	400	MJQ Crew	104
3	6"(Booster)	90	450	MWJ	15
				Scientist	5
				MJQ (Other)	0

Geologic Information @24:00		Telinite		Heli Information @24:00	
From	To	Lithology of cuttings	2	Fit. No.	Time
			7	1	09:15
			2	2	11:25
			4	3	
			4	4	

Shale Shaker / Centrifuge @24:00		Materials Stock on Board @24:00		Safety (HSE) and other information	
No.1	30, 60	No.4	30, 60	Incident	Last Incident
No.2	30, 60	No.5	30, 60	LTA	No. LTA
No.3	30, 60	No.6	30, 60	HJNS cards	27

Mud Volume @24:00		Marine Information @24:00	
Mud Volume (m3)	133	Heave (m)	0.3
KNPP mud (1.35)	424	Pitch (deg)	0.2
Fracseal	30	Roll (deg)	0.1
Barolift	30	Vessel Heading (deg)	025
KNPP mud (1.39)	303	Riser Tension (kN)	9600.0
Inhibited mud	216	V.D. Load (ton)	11266
STOPLOSS (1.37)	47	Max Draught (m)	9.0
Hi vis	11	Thruster (kW)	800
MUDPUSH II	16		
total	1180		

Weather Information		Today's Schedule:	
Time	Weather	Temp. (degC)	WOC. Tag TOC. Pressure test cement plug #2.
24:00	r	12.0	17.3