Chikyu DAILY MORNING REPORT

Mission No. : CK13-04 **Exp. No. :** Exp 348 **Report No. :** 124

Site Name : C0002 **Hole Name :** C0002P **Lat.** 33° 18.0507'N **Long.** 136° 38.2029'E **Report Date :** 15/Jan/2014

Depth : @24:00 4932 mBRT 2964.5 mbsf (14.5") Progress : m Seabed Depth : 1,967.5 mBRT RT-MSL : 28.5 m

Depth : @06:00 4932 mBRT 2964.5 mbsf (14.5") Drilling/Coring/Underreaming Hrs. : 0.00 hrs LAST CASING : 13-3/8" x 1,936.50 mbsf(3,904.0 mBRT)

Summary of Operation on 14-Jan : Ream and open to 14-1/2" hole. Pipe stuck, work pipe and pipe free. Circulation.

Present Operation @ 06:00 on 15-Jan : Continue circulation. POOH to 4655mBRT.

Time Breakdown (00:00 - 24:00 on 14-Jan)

mBRT: meter below rotary table
mbsf: meter below sea floor

From	To	Hrs	Code	Detail of Operation
0:00	3:45	3:45	W&R	Continue ream down to 4928mBRT.
				WOB: 0-20kN, 900gpm x 32-33MPa, 140rpm x 17-20kN-m.
				Stall HPS @4927mBRT, SPP was increased to 35MPa. Decrease pump rate and release HPS immediately.
				Found tight hole 4912 - 4918mBRT, stall HPS @ 4916mBRT. Reaming several times and confirm opening hole.
3:45	4:00	0:15	OH	Open hole to 14-1/2"hole 4928 - 4932mBRT (2960.5 - 2964.5mbsf, 4m).
				WOB: 0kN, 900gpm x 33MPa, 140rpm x 16-20kN-m.
				ROP: ave 27m/hr, Max 30.9m/hr, min 20m/hr. Caving: Tr.
4:00	16:15	12:15	SP	Pack off @4932mBRT. Attempt free pipe.
				(4:00-5:00) Stall HPS and SPP was increased to 900gpm x 38MPa (SPP limiter is activated).
				Decrease pump rate to 30spm x 25MPa, release HPS torque and work pipe (Max overpull 600kN, slack 300kN).
				SPP was decreased to 21.4MPa gradually. Jar no fired.
				Stop pump and work pipe (Max overpull 1100kN, slack 400kN), SPP was decreased to 4.5MPa gradually. Jar no fired.
				(5:00- 6:50) Re-start pump Hi-vis with 25gpm and continue work pipe (Max overpull 1200kN, slack 350kN), SPP was increased to 13.4MPa gradually.
				Stop pump and work pipe (Max overpull 1500kN, slack 250kN), SPP was decreased to 1.5MPa gradually.
				Re-start Pump Hi-vis with 75gpm and work pipe (Max overpull 1500kN, slack 600kN), SPP was increased to 20MPa gradually. Pumped 11m3 Hi-vis
				(6:50-7:30) Stop pump and work pipe, SPP was decreased to 11MPa gradually.
				(7:30-8:00) Slack 600kN, apply torque 36kN-m and circulate with 200gpm, SPP was decreased 23.0 to 22.2MPa.
				Meanwhile, pump 11m3 Hi-vis and 10m3 Tel-DD fluid (8%) @7:41.
				(8:00-9:20) Continue circulation (225gpm x 21.4MPa) & work pipe (Max overpull 1000kN, slack 700kN), return was increased gradually & SPP is decreased 225gpm x 7.8MPa.
				(9:20-11:30) Increase pump rate to 900gpm x e and work pipe (Max overpull: 1500kN, slack: 700kN).
				(11:30-12:30) Stop work pipe and circulate for monitor SPP. SPP was decreased 37 to 35MPa x 900gpm.
				(12:30-16:15) Continue work pipe (Max overpull 1500kN, Slack 550kN).
				Observe many cuttings on shale shaker @13:00.
				Pump 10m3 Hi-vis 4times.
				Continue circulate to monitor SPP and cuttings volume.
				SPP was decrease 900gpm x 35.2MPa to 34.0MPa.
16:15	17:15	1:00	RR	Change swab of #1, 2 cylinder of #2 mud pump.
				Pick up off bottom and circulate with 450gpm x11 MPa and boost riser 450gpm x 5.8MPa.
17:15	18:00	0:45	C&C	Circ w/900gpm x 33.5-34.5Mpa. Cuttings decrease.
18:00	21:15	3:15	C&C	Spot 6m3 clean lube around BHA (2500cts) @4931.5mBRT. Attempt to free pipe with apply torque (36 - 38kNm), Max overpull 1500kN, slack 600kN.
				Work pipe 30min each at 2500/2750/3000/3250/3500/3750/4000 cts displacement.
				Apply 1500kN OP x 5min at displacement 4000cts and reduced OP 1350kN. Keep pulling string 3m. Reduced OP 700kN.
				Set back to neutral tension and apply torque 38kNm. Broke pipe free.
				Establish circulation and rotation 90spm x 11.2MPa, 140rpm x 22kN-m.
21:15	24:00	2:45	C&C	Sweep hole 10m3 x 2 times hi-vis 900gpm x 34.0MPa. And ream down to 4932mBRT with 700gpm for hole cleaning.
				Sweep hole 10m3 Hi-vis Bottoms up, 900gpm x 34.3MPa, 140rpm x 18-22kN-m, boost riser 450gpm x 4.5MPa.
				Note:
				Isolate conduit line due to leakage pressure.
				Inject glycol 20gal to BOP and 10gal to LMRP.
				Sea current: Chikyu 1.2-3.1 knot. SW 5 miles 2.4-4.0 knot.

	Angle	Deg
LFJ	0	0
LMRP	130	0.5
BOP	180	0.5

Bulls eye reading @13:34

Top of Anderreamer cutter
4.45m from bottom of bit.

* Cuttings size become smaller gradually.
~1" @13:00 → under 1/8" @14:00
Cutting skip filled: 4 skips (13:00 - 14:00)
Cutting skip filled: 3 skips (14:00 - 15:00)
16 full skips (0:00-24:00)

Time Breakdown (00:00 - 06:00 on 15-Jan) * The data on 00:00 - 06:00 is unofficial.

From	To	Hrs	Code	Detail of Operation
0:00	2:45	2:45	C&C	Continue circulate and bottoms up.
				900gpm x 33MPa.
2:45	6:00	3:15	Trip	POOH to 4655mBRT.
				HPS stall @4929mBRT while pump up (300gpm x 7.2MPa). Lower HPS and increase pump rate 450gpm x 12.5MPa, release HPS. Ream up 4928 to 4918mBRT.
				Pump and rotation to pull to 4918mBRT and rack back.
				POOH 4918 to 4807mBRT.
				Check drag of whole stand for POOH and RIH on elevator.
				POOH: 500kN OP @4912mBRT, 500kN OP @4893mBRT, 430kN OP @4875mBRT, 500kN OP @4868mBRT, normal drag 300kN while POOH.
				Normal drag reduced 200kN from 4867mBRT. Pump up from 4914-4882mBRT.
				RIH: Take weight 200kN at 4915mBRT.
				Note:
				Sea current: Chikyu 1.6knot, SW 5miles 2.1knot @6:00.

Bit Record

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. (kern)	Dull Condition Inner	Outer	Dull	Loc.	B	G	O.D.	RP
No.9h	12.25"	NOV	DSH616D-I2	M423	A162762	13x7, 14x2																	
	14.5"	NOV	Anderreamer		1225-0131	8 x1	3919.00	4,932.00	1,013.0	9.19	0	50	140		42.0								

BHA Record

No.9h	14-1/2" Underream	Bit x bit sub x 14.5"Anderreamer x float sub (w/flappretype float) x 8-1/2"DC (1) x 12-3/16" Stab x 8-1/2"DC (11) x Drilling Jar x 8-1/2"DC (2) x XO x 5.68"HWDP (12) x XO x 5"DP S-140 (67stds) x 5-1/2"DP S-140 (21stds) x XO x 5-1/2"DP S-150 (13stds) x XO x 6-5/8"DP Z-140

Hook Wt. (ken) @ 4,932.0 mBRT

Hook Load	3,230
BHA	315
Below HWDP	290
Below Jar	250
Hook + HPS	730
Hook block	307

Jar Rotating time S/N: D-1046H

Today	9.19	Total	0.00	hrs

Mud Properties

Mud Type	Time	Depth (mBRT)	MW	VIS	PV	YY	Gel St. (10", 10')	WL	Cake	pH	Pf	Cl-	Sand	Oil	Solid	MBC	Temp In	Temp Out	K+	n	K	LGS
KNPP	3:00	pit	1.32	164	57	74	15	23	2.6	0.5	11.0	0.2	120,700	0.2	0	15.0	2.25	11		38,100	0.52	5.08	2.7
KNPP	15:00	4,300	1.32	151	52	66	15	23	2.5	0.5	10.5	0.2	120,700	0.2	0	15.0	2.25	13		35,800	0.52	2.64	2.8

Cutting skip @24:00

Empty	Full	Total
33	3	36

Mud Pumps : 14-P-220 @ 49320.0 mBRT 5.00 gallon/stroke @97%

No.	Liner Size	SPM	GPM	Press. (MPa)	Ann. Vel. (m/min) DC	Ann. Vel. (m/min) DP
1	6"	180	900	34.0	46	37
2	6"					
3	6"					

Personnel @24:00

CDEX	6
MQJ Crew	100
MQJ (SC,Other)	1
MQJ (Sub sea & Hyd)	2
MWJ	17
Scientist	0
Telnite	2
Oceaneering	6
Schlumberger-CMT	3
SLB WL	0
Geoservice	6
Vetco	1
Weatherford (CSG)	4
MI-Swaco	4
NOV Anderreamer	1
Baker (Liner Hanger)	2
GUP Engineering (Mud Pump Repair)	1
Total	156

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

Item	Received	Used	Stock
Barite (Bulk)		2,000	110,000
Kunigel-VO (Bulk)			10,800
NaCl			10,000
KCl			3,000
Tel-Polymer DX / L / H		100/80/0	3480/1520/1300
XCD-Polymer			0
Soda Ash			1,275
KOH		75	1,525
Clean Lube		5,600	0
Tel Clean			600
Bi-Carbonate			1,000
Lime			1,240
Defoamer 30C			192
Telnite GXL			162
Tel DD		800	2,400
NaOH			800
Lignite NC			2,000
Tel Stop G / P			500 / 1000
Tel Mica C / M / F			500 / 1,000 / 1,000
Tel Plug C / M / F			500 / 1,200 / 980
Tan Cal M / F / FF			4230 / 4500 / 0
EZ Spot			550
Speeder P / X			1700 / 1700
Baracor-100 (gal)			0
Astex S			2,400
Treat HS			2,160
Xanvis		75	1,025
Telnite OS-5			0
Telnite HEC			0

ROV

Status	Diving
Last Dive	
Injection Skid	41 / 101 gal

Heli Information

Flt. No.	Time Arrived	Time Departed	Passenger Are.	Passenger Dept.
1	9:05	9:11	1	0
2				
3				
4				

Safety (HSE) and other information

Incident	Last Incident	No. LTA
	13/Feb/2013	
LTA		
HUNS cards	33	

Remarks

Geologic Information

From	To	Lithology of cuttings

Shale Shaker Centrifuge: hrs

No.1	#10, #230 x 2	No.4	#10, #230 x 2	No.1	12.50
No.2	#10, #230 x 2	No.5	#10, #200 x 2	No.2	off
No.3	#10, #230 x 2	No.6	#10, #200 x 2	No.3	off

Mud Volume (m3)

KNPP mud (1.32)	140
KNPP mud (1.28)	63
KNPP mud (1.29)	23
LCM 20% (1.13)	24
Hi-vis (1.32)	37
KNPP (1.45, HW & Hivis)	23
total	391

Materials Stock on Board @24:00

Item	Unit	Received	Used	Stock
Fresh Water	m3	88.1	100.8	174.6
Potable Water	m3	0.0	14.7	257.4
Drill Water	m3	0.0	41.0	711.1
Fuel	m3	0.0	60.9	2,251.4
Lube, Oil	Ltrs	0.0	2,000.0	41,200.0
Heli Fuel	Ltrs	0.0	0.0	0.0
Cement "GWC"	ton	0.0	0.0	0.0
Cement "G"	ton	0.0	0.0	0.0

Boat Information @24:00

Boat Name	Status	Time @Chikyu Departed	Time @Chikyu Arrived
Kaiko	Chikyu	4:00	17:15
Shinchou-maru	Current survey, SW 5miles		
Hakuryu-maru	Chikyu		

Marine Information @24:00

Heave (m)	0.2
Pitch (deg)	0.2
Roll (deg)	0.1
Vessel Heading (deg)	268
Riser Tension (kN)	9400
V.D. Load (Moon)	9799.6
Max Draught (m)	9.0
Thruster (kW)	2650

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	o	10.0	19.1	1025.1	8.4	45.0	10.8	1.1	40	5.6	2.8	101	22.0

Today's Schedule: Continue POOH to CSG window. Wash down and chack hole gauge to 4550 and ream down to bottom. Circulate bottoms up.

Reported by : D. Ikenomoto / T. Yokoyama / S. Kataoka

Approved by : T. Saruhashi