

# Drilling Mechanics Log

DML

C0002Q Run1, Measured Depth 1:500



Company: JAMSTEC

Well: C0002Q

Field: C0002

Rig Name: D/V Chiky

Prefecture: Wakayama

Country: Japan

Latitude: 33° 18' 3.042" N

UWID:

Longitude: 136° 38' 12.174" E

Rig Name:

Block:

Rig Type:

FL: Pacific Ocean

D/V Chiky  
Drill ship

FL1: X = 652,382.39 m

FL2: Y = 3,685,834.62 m

Log Measured From: - Drill Floor: 28.50 m  
Permanent Datum: - Mean Sea Level

Ground Level: 1939.00 m

Acquisition Dates: 17-Nov-2018 -- 21-Nov-2018

Log Interval: 4866.00(m)MD -- 4990.00(m)MD

Index Types: Measured Depth

Index Scales: 1:500

Depth Source: Driller's Depth

Depth Sensor: DES

Print Type: Final

Spud Date: 26-Oct-2018

Other Services:  
Direction and Inclination



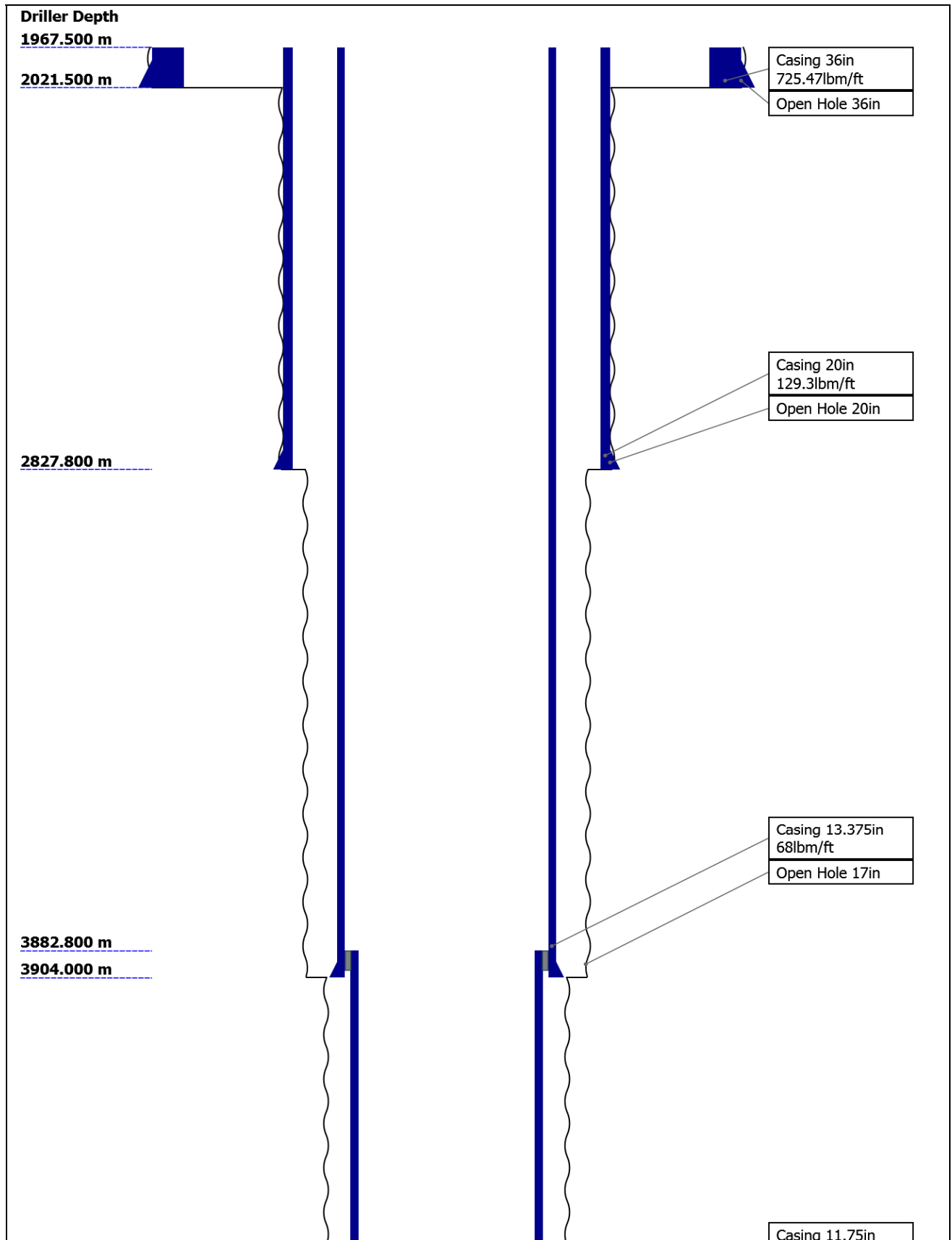
## Disclaimer

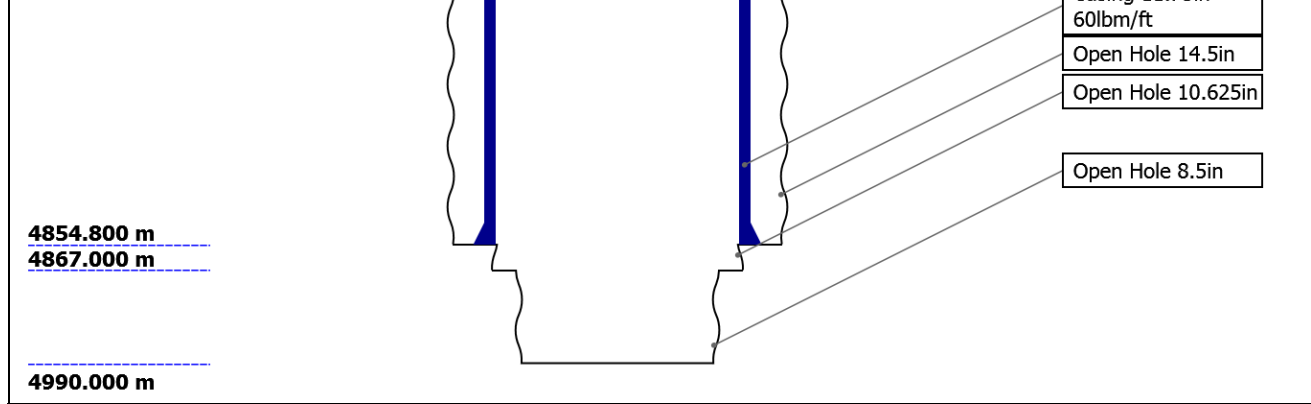
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# Well Sketch





## Borehole Size/Casing Record

Bit						
Bit Size ( in )	36	20	17	14.5	10.625	8.5
Top Driller ( m )	1967.5	2021.5	2827.8	3904	4854.8	4867
Bottom Driller ( m )	2021.5	2827.8	3904	4854.8	4867	4990
Casing						
Size ( in )	36	20	13.375	11.75		
Weight ( lbm/ft )	725.47	129.3	68	60		
Inner Diameter ( in )	32.099	18.779	12.415	10.772		
Grade	X56	X56	N/A	N/A		
Top Driller ( m )	1967.5	1967.5	1967.5	3882.8		
Bottom Driller ( m )	2021.5	2827.8	3904	4854.8		




## Operational Run Summary

Parameter ( unit )	Run1				
Date Log Started	17-Nov-2018				
Time Log Started	11:53:55				
Date Log Finished	21-Nov-2018				
Time Log Finished	12:41:56				
Bit Size ( in )	8.500				
Bit Start Depth ( m )	4867.00				
Bit Stop Depth ( m )	4990.00				
Top Log Interval ( m )	4848.00				
Bottom Log Interval ( m )	4990.00				
Max Hole Deviation ( deg )	4.01				
Azimuth of Max Deviation ( deg )	145.27				
Logging Unit Number	OLU-MB 8054				
Logging Unit Location	Zone2				
Recorded By	SMoriyama/SMurakami/KBian				
Witnessed By	YSanada/YKido				
Service Order Number	18JAP0007				

## Borehole Fluids

Parameter( unit )	Run1				
Fluid Type	Water				
Max Recorded Temperatures ( degC )	NaN				
Source of Sample	Active Tank				
Salinity ( ppm )	34972.18				
Density ( g/cm3 )	1.37				
Funnel Viscosity ( s )	56				
Fluid Loss ( cm3 )	2.5				
PH					
Source RMF					
RMC	Pressed				
RM @ Meas Temp ( ohm.m@degC )	0.2 @ 20				
RMF @ Meas Temp ( ohm.m@degC )	0.15 @ 20				
RMC @ Meas Temp ( ohm.m@degC )					
RM @ BHT ( ohm.m@degC )	0.07 @ 100				
RMF @ BHT ( ohm.m@degC )	0.05 @ 100				
RMC @ BHT ( ohm.m@degC )	NaN @ 100				
Total Solid ( % )	16				
High Gravity Solids ( % )	15				

## Remarks and Equipment Summary

Run1: Toolstring	Run1: Remarks																															
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Equip name</th> <th style="width: 10%;">Length</th> <th style="width: 50%;"></th> <th style="width: 10%;">MP name</th> <th style="width: 5%;">Offset</th> </tr> </thead> <tbody> <tr> <td>UBHO: 6 3/4":SB D72254</td> <td style="text-align: right;">33.43</td> <td style="text-align: center;"></td> <td style="text-align: left; color: blue;">Schlumberger</td> <td></td> </tr> <tr> <td>NMDC: 6 3/4"[2] :KSBD14856</td> <td style="text-align: right;">32.47</td> <td></td> <td style="text-align: left; color: blue;">Schlumberger</td> <td></td> </tr> <tr> <td>TELE675-1WOB:B 1755</td> <td style="text-align: right;">23.04</td> <td></td> <td style="text-align: left; color: blue;">Schlumberger</td> <td></td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">— D&amp;I</td> <td></td> <td style="text-align: right;">18.23</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">— GR</td> <td></td> <td style="text-align: right;">17.58</td> </tr> </tbody> </table>	Equip name	Length		MP name	Offset	UBHO: 6 3/4":SB D72254	33.43		Schlumberger		NMDC: 6 3/4"[2] :KSBD14856	32.47		Schlumberger		TELE675-1WOB:B 1755	23.04		Schlumberger				— D&I		18.23			— GR		17.58	<p>Depth Reference is driller's depth measured from Rotary Table.</p> <hr/> <p>Data presented is Recorded Mode data which was acquired while drilling.</p>	
Equip name	Length		MP name	Offset																												
UBHO: 6 3/4":SB D72254	33.43		Schlumberger																													
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		— D&I		18.23																												
		— GR		17.58																												



ROP 15.88

IWOB 14.86

X/O: 6 3/4":OSS 14.03  
TJ1407002E Schlumberger

NMDC: 6 3/4"[1] 13.56  
:26939-4 Schlumberger

Fit Sub: 6 3/4":T 10.61  
H0915936-2 Schlumberger

Stab: 6 3/4":THD 9.84  
0812973-3 Schlumberger

Motor: 6 3/4":61 8.18  
50778 Schlumberger

Bit: 8 1/2":RJ819 0.24  
8 Smith

TOOL\_ZERO

Lengths are in m  
Maximum Outer Diameter = 8.500 in  
Line: Sensor Location, Value: Gating Offset  
All measurements are relative to TOOL\_ZERO

## Survey Record

### Survey Calculation

Method :	Minimum Radius of Curvature	DLS Method :	Lubinski
North Reference :	Grid North	Total Correction Formula :	Magnetic Dec - Grid Convergence
Grid Convergence :	0.90 deg		

<b>Rig Location</b>					
Latitude :	33° 18' 3.042" N	Longitude :	136° 38' 12.174" E		
<b>Tie In Point</b>					
Measured Depth:	4853.87 m	Inclination:	1.64 deg	Azimuth:	90.69 deg
True Vertical Depth:	4852.02 m	North Displacement:	-0.27 m	East Displacement:	49.95 m
N-S VSec Origin:	0.00 m	E-W VSec Origin:	0.00 m	Vertical Section Azimuth:	90.28 deg

<b>D&amp;I Inits Computed and Values Used - Run5</b>					
Geomagnetic Model :	HDGM 2018	Geomagnetic Date :	17-Nov-2018		
Computed Location B :	46164.86 nT +/- 300.00nT	Used Location B :	46164.86 nT +/- 300.00nT		
Computed Location G :	998.92 mgn +/- 2.50mgn	Used Location G :	998.92 mgn +/- 2.50mgn		
Computed Magnetic Dip :	47.02 deg +/- 0.45deg	Used Magnetic Dip :	47.02 deg +/- 0.45deg		
Computed Magnetic Dec :	-7.16 deg	Used Magnetic Dec :	-7.16 deg		
Computed Total Correction :	-8.06 deg	Used Total Correction :	-8.06 deg		

<b>Survey Quality Index</b>					
2 : Long Survey failed mag criteria	28 : Tie-In Point				

<b>Survey Correction Index</b>					
0 : No correction					

<b>Survey Description Index</b>					
0 : Not Flagged Survey					

Seq	MD (m)	Incl (deg)	Azim (deg)	Course (m)	TVD (m)	V Sec (m)	N/ -S (m)	E/ -W (m)	Closure (m)	at Azim (deg)	DLS deg/30m	Tool Type	QI	CI	DI
1	4853.87	1.64	90.69	----	4852.02	49.95	-0.27	49.95	49.95	90.31	0.00	TIP	28	0	0
2	4870.63	3.61	138.88	16.76	4868.77	50.54	-0.67	50.54	50.54	90.76	5.00	TeleScope	2	0	0
3	4882.77	3.16	140.86	12.13	4880.88	51.00	-1.22	51.00	51.01	91.37	1.14	TeleScope	2	0	0
4	4897.67	0.64	145.72	14.91	4895.77	51.31	-1.60	51.30	51.33	91.79	5.07	TeleScope	2	0	0
5	4908.67	0.96	50.36	11.00	4906.77	51.42	-1.60	51.41	51.44	91.78	3.28	TeleScope	2	0	0

## Run1

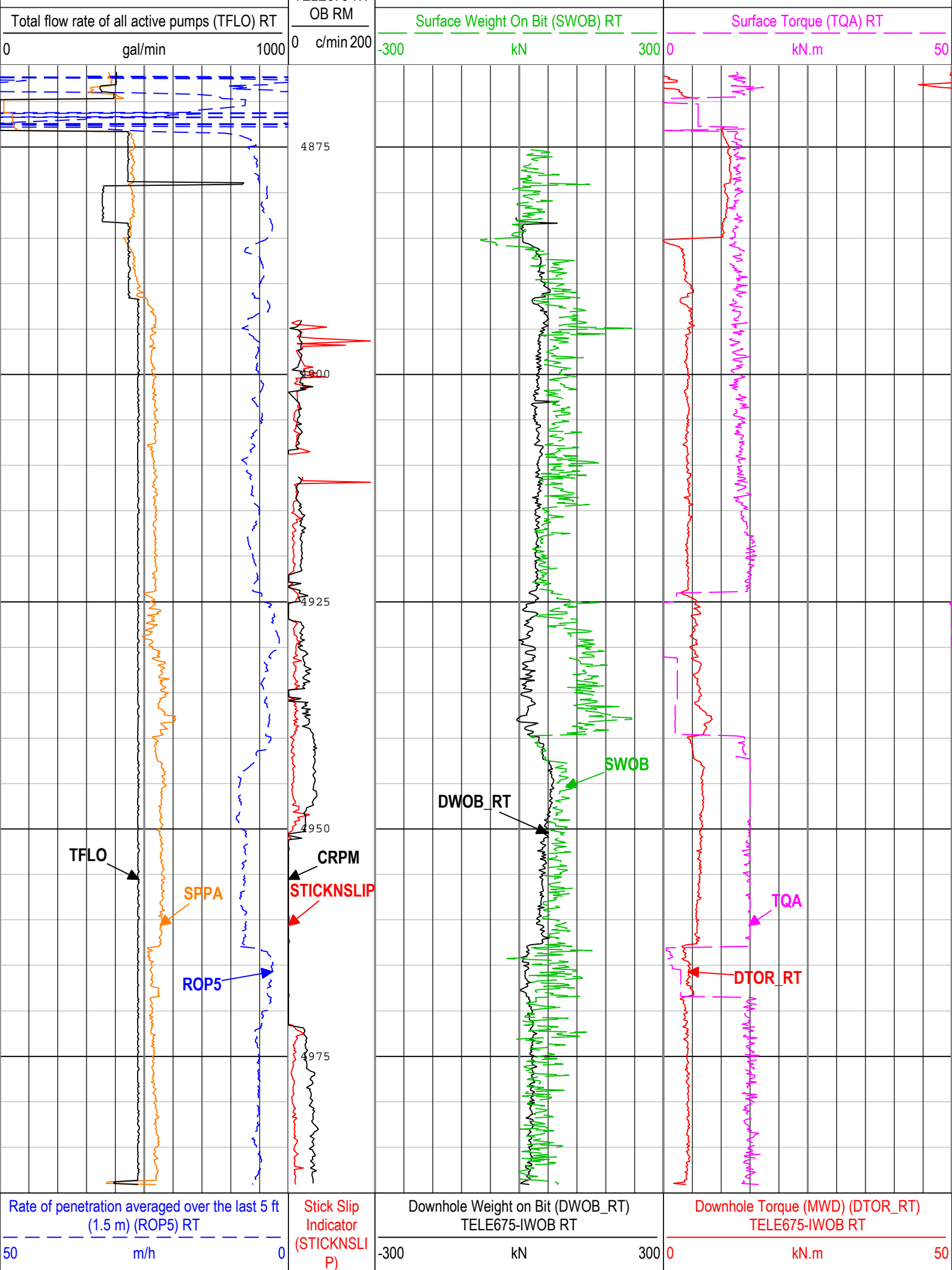
<b>Software Version</b>		
<b>Acquisition System</b>		<b>Version</b>
Maxwell 2018 SP2		8.2.104493.3100
Application Patch		DnM_TestKit-PD-DHS31-2018-2_8.2.104864

<b>Pass Summary</b>							
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Include Parallel Data
Run1	Drilling	Down	4866.69 m	4989.20 m	17-Nov-2018 11:53:55 AM	21-Nov-2018 12:41:56 PM	Yes
All depths are referenced to toolstring zero							

<b>Log</b>	Company: JAMSTEC    Well: C0002Q Run1: Drilling: S122
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Description: Format: Log ( Drilling Mechanics Log 675 RM MD )    Index Scale: 1:500    Index Unit: m    Index Type: Measured Depth    Creation Date: 04-Mar-2019 08:07:52

	Stick Slip Indicator (STICKNSLI P) TELE675-IW OB RM	
Rate of penetration averaged over the last 5 ft (1.5 m) (ROP5) RT	0 c/min 400	
50 m/h 0	Collar Rotational Speed (CRPM) TELE675-IW	Downhole Weight on Bit (DWOB_RT) TELE675-IWOB RT
Standpipe Pressure (SPPA) RT	-300 kN 300	Downhole Torque (MWD) (DTOR_RT) TELE675-IWOB RT
0 MPa 30		0 kN.m 50



Standpipe Pressure (SPPA) RT		TELE675-IW OB RM	Surface Weight On Bit (SWOB) RT		Surface Torque (TQA) RT						
0	MPa	30	0	c/min	400	-300	kN	300	0	kN.m	50
Total flow rate of all active pumps (TFLO) RT		Collar Rotational Speed (CRPM) TELE675-IW OB RM									
0	gal/min		1000								
		0	c/min 200								

Description: Format: Log ( Drilling Mechanics Log 675 RM MD ) Index Scale: 1:500 Index Unit: m Index Type: Measured Depth Creation Date: 04-Mar-2019 08:07:52

## Channel Processing Parameters

### Run1: Parameters

Parameter	Description	Tool	Value	Unit
DFD	Drilling Fluid Density	Borehole	1.37	g/cm3

## Tool Control Parameters

### Run1: Parameters

Parameter	Description	Tool	Value	Unit
DTOF	DTOR Offset	TELE675-IWOB	Time Zoned	kN.m
DWOB_BETA	DWOB Beta Pressure Correction Factor	TELE675-IWOB	Time Zoned	
DWOF	DWOB Offset	TELE675-IWOB	Time Zoned	kN
DWOB_ZEROTOOLP	DWOB Differential Pressure Drop at Zero Weight-on-Bit	TELE675-IWOB	Time Zoned	MPa

## Time Zone Parameters

Parameter	Value	Start Time	Stop Time	Start Depth ( m )	Stop Depth ( m )
DTOF	-13.06	17-Nov-2018 11:53:55	18-Nov-2018 07:27:18	4866.691	4869.612
DTOF	-14.52	18-Nov-2018 07:27:18	18-Nov-2018 13:38:50	4869.612	4884.953
DTOF	-22.09	18-Nov-2018 13:38:50	21-Nov-2018 12:41:56	4884.953	4989.195
DWOB_BETA	0	17-Nov-2018 11:53:55	18-Nov-2018 12:44:29	4866.691	4882.744
DWOB_BETA	4.25	18-Nov-2018 12:44:29	18-Nov-2018 12:44:39	4882.744	4882.769
DWOB_BETA	4.27	18-Nov-2018 12:44:39	18-Nov-2018 13:02:08	4882.769	4883.48
DWOB_BETA	2.29	18-Nov-2018 13:02:08	18-Nov-2018 13:45:07	4883.48	4884.953
DWOB_BETA	2.13	18-Nov-2018 13:45:07	21-Nov-2018 12:41:56	4884.953	4989.195
DWOF	-313.6	17-Nov-2018 11:53:55	18-Nov-2018 07:27:47	4866.691	4869.612
DWOF	-856.28	18-Nov-2018 07:27:47	18-Nov-2018 12:44:29	4869.612	4882.744
DWOF	-633.87	18-Nov-2018 12:44:29	18-Nov-2018 12:44:39	4882.744	4882.769
DWOF	-642.77	18-Nov-2018 12:44:39	18-Nov-2018 13:02:08	4882.769	4883.48
DWOF	-624.98	18-Nov-2018 13:02:08	18-Nov-2018 13:45:07	4883.48	4884.953
DWOF	-589.39	18-Nov-2018 13:45:07	21-Nov-2018 12:41:56	4884.953	4989.195
DWOB_ZEROTOOLP	0	17-Nov-2018 11:53:55	18-Nov-2018 12:44:29	4866.691	4882.744
DWOB_ZEROTOOLP	2.65	18-Nov-2018 12:44:29	18-Nov-2018 13:02:08	4882.744	4883.48
DWOB_ZEROTOOLP	4.16	18-Nov-2018 13:02:08	18-Nov-2018 13:45:07	4883.48	4884.953
DWOB_ZEROTOOLP	4.15	18-Nov-2018 13:45:07	21-Nov-2018 12:41:56	4884.953	4989.195

All depth are at tool zero.



**Company:** JAMSTEC  
**Well:** C0002Q  
**Field:** C0002  
**Rig Name:** D/V Chikyu  
**Prefecture:** Wakayama  
**Country:** Japan



