

Drilling Mechanics Log

DML

Single Run Log, Measured Depth 1:200

Schlumberger

Country: Japan

Wakayama

Prefecture

Rig Name: D/V Chikyu

Field: C0002

Well: C0002T

JAMSTEC

Company:

Company: JAMSTEC

Well: C0002T

Field: C0002

Rig Name: D/V Chikyu

Prefecture Wakayama

Country: Japan

Latitude: 33° 18' 3.042" N

UWID:

Longitude: 136° 38' 12.174" E

Rig Name:

D/V Chikyu

Block:

Rig Type:

Drill Ship

FL: Pacific Ocean

FL1: X=652382.39m

FL2: Y=3685843.62m

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

Ground Level: 1939.00 m

Acquisition Dates: 14-Feb-2019 -- 17-Feb-2019

Log Interval: 4784.00(m)MD - 4804.00(m)MD

Index Types: Measured Depth

Index Scales: 1:200

Depth Source: Driller's Depth

Depth Sensor: DES

Print Type: Final

Spud Date: 26-Oct-2018

Other Services:
Direction and Inclination

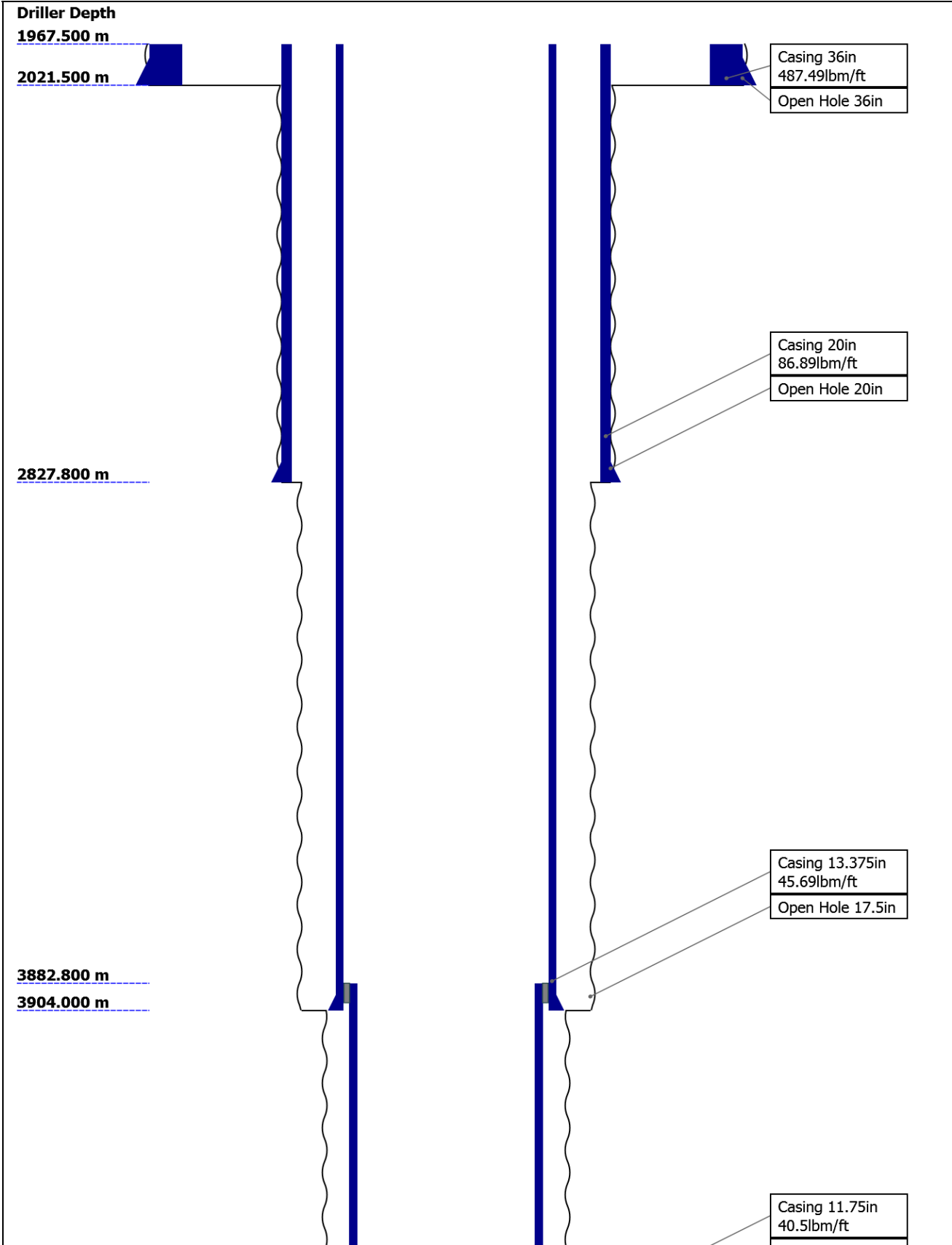
Disclaimer

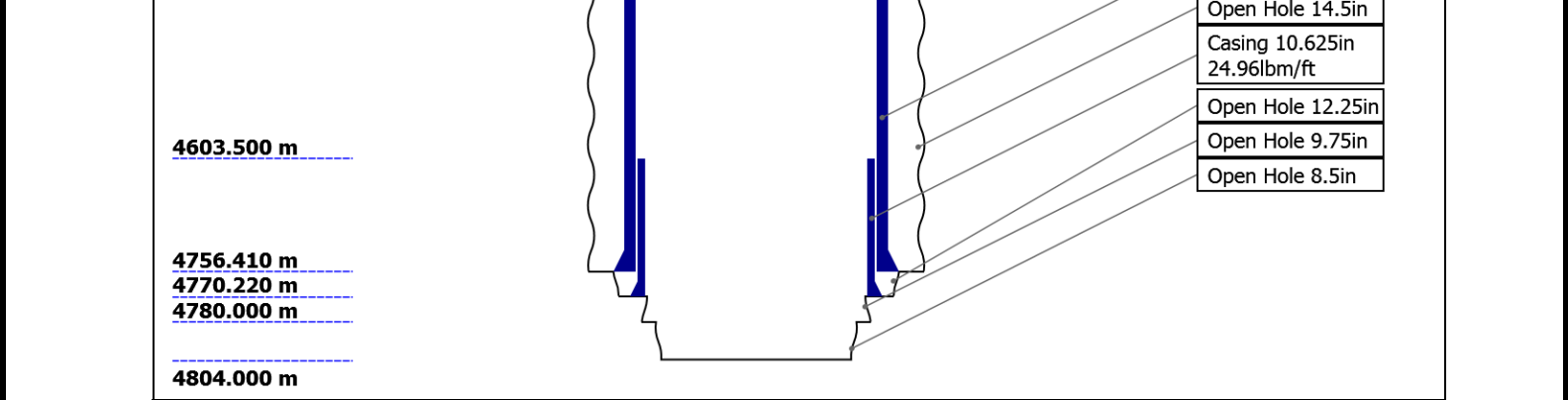
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Well Sketch






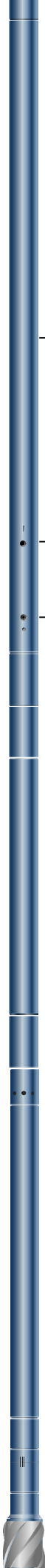
Bottom Log Interval (m)	4804.00					
Max Hole Deviation (deg)	5.00					
Azimuth of Max Deviation (deg)	202.00					
Logging Unit Number	OLU-MB8054					
Logging Unit Location	Zone2					
Recorded By	YePu/Ikhsan Anugrah					
Witnessed By	YSanada/YKido					
Service Order Number	18JAP0007					

Borehole Fluids

Parameter(unit)	Run 1					
Fluid Type	Water					
Max Recorded Temperatures (degC)	37.84					
Source of Sample	Active Tank					
Salinity (ppm)	34972.18					
Density (g/cm3)	1.36					
Funnel Viscosity (s)	68					
Fluid Loss (cm3)	7					
PH	11.9					
Source RMF	Pressed					
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 (%)	18					
High Gravity Solids (%)						

Remarks and Equipment Summary

Run 1: Toolstring	Run 1: Remarks
<div> <div> <div>Equip name</div> <div>NMDC: 6 3/4"[2]</div> <div>:KSBD14859</div> </div> <div> <div>Length</div> <div>31.99</div> </div> <div> <div>MP name</div> <div>Schlumberger</div> </div> <div> <div>Offset</div> </div> </div> 	Depth Reference is driller's depth measured from Rotary Table.
	Data presented is Recorded Mode data which was acquired while drilling.
	Reason of POOH: Client called well TD
	Drilling Time: 10.42 hrs
	Pumping Time: 20.65 hrs
	No DTOR reading because of the dpoint issue.



— D&I 16.71

! — ROP 14.36

• — IWOB 13.35

X/O: 6 3/4"[1]:B 12.51
T-2746-06

Schlumberger

NMDC: 6 3/4"[1] 12.03
:CNLK09012

Schlumberger

Flt Sub: 6 3/4":T 9.15
H0915936-1

Schlumberger

Motor: 6 3/4":61 8.44
250778

Schlumberger

Bit: 8 1/2"

0.25

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		

Rig Location			
Latitude :	33° 18' 3.042" N	Longitude :	136° 38' 12.174" E

Tie In Point			
Measured Depth:	4780.00 m	Inclination:	0.46 deg
True Vertical Depth:	4778.21 m	North Displacement:	3.60 m
N/-S VSec Origin:	0.00 m	E/-W VSec Origin:	0.00 m
		Azimuth:	202.42 deg
		East Displacement:	47.26 m
		Vertical Section Azimuth:	95.07 deg

D&I Inits Computed and Values Used - Run 1			
Geomagnetic Model :	HDGM 2018	Geomagnetic Date :	14-Feb-2019
Computed Location B :	46173.37 nT +/- 300.00nT	Used Location B :	46173.37 nT +/- 300.00nT
Computed Location G :	998.92 mgn +/- 2.50mgn	Used Location G :	998.92 mgn +/- 2.50mgn
Computed Magnetic Dip :	47.03 deg +/- 0.45deg	Used Magnetic Dip :	47.03 deg +/- 0.45deg
Computed Magnetic Dec :	-7.17 deg	Used Magnetic Dec :	-7.17 deg
Computed Total Correction :	-8.07 deg	Used Total Correction :	-8.07 deg

Survey Quality Index			
2 : Long Survey failed mag criteria	9 : Manual	28 : Tie-In Point	

Survey Correction Index			
0 : No correction			

Survey Description Index			
0 : Not Flagged Survey	7 : Projection to Bit		

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	4764.83	1.96	109.98	----	----	----	----	----	----	----	----	TeleScope	2	0	0
2	4780.00	0.46	202.42	15.17	4778.21	46.76	3.60	47.26	47.40	85.64	0.00	TIP	28	0	0
3	4784.97	2.06	129.90	4.97	4783.18	46.82	3.52	47.32	47.45	85.74	11.91	TeleScope	2	0	0
4	4787.03	2.39	82.62	2.07	4785.24	46.90	3.51	47.39	47.52	85.77	26.27	TeleScope	2	0	0
5	4804.00	5.00	160.00	16.97	4802.18	47.56	2.86	48.00	48.08	86.59	8.92	Other	9	0	7

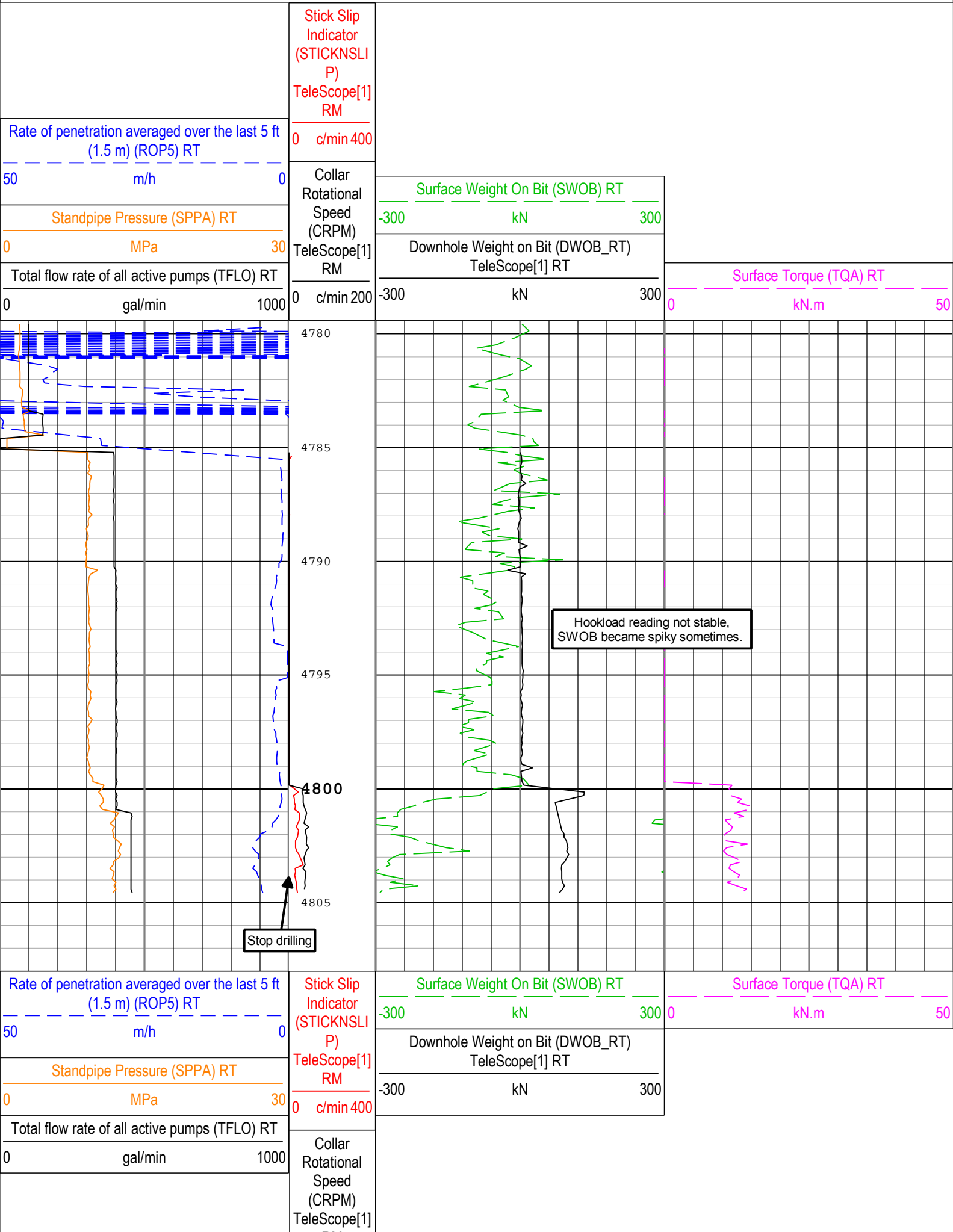
Run 1

Run 1_DML

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

Composite Summary							
Run Name	Pass Objective	Direction	Top	Bottom	Start	Stop	Include Parallel Data
Run 1	Ream Down 1	Down	4785.21 m	4793.67 m	16-Feb-2019 8:01:15 AM	16-Feb-2019 1:46:21 PM	Yes
Run 1	Drilling	Down	4779.44 m	4804.74 m	14-Feb-2019 9:47:33 PM	17-Feb-2019 11:14:07 AM	Yes

All depths are referenced to toolstring zero



	RM
0	c/min 200

Description: Format: Log (Drilling Mechanics Log 675 RM MD) Index Scale: 1:200 Index Unit: m Index Type: Measured Depth Creation Date: 28-Feb-2019 18:24:38

Channel Processing Parameters	
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Run 1: Parameters				
Parameter	Description	Tool	Value	Unit
DFD	Drilling Fluid Density	Borehole	1.36	g/cm3

Tool Control Parameters	
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Run 1: Parameters				
Parameter	Description	Tool	Value	Unit
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

Run 1Time Zoned Parameters

Pass Drilling					
Parameter	Value	Start Time	Stop Time	Start Depth (m)	Stop Depth (m)
DWOB_BETA		14-Feb-2019 21:47:33	16-Feb-2019 07:58:52	4779.442	4793.666
DWOB_BETA	5.88	16-Feb-2019 07:58:52	16-Feb-2019 12:31:31	4793.666	4793.666
DWOB_BETA	5.7	16-Feb-2019 12:31:31	16-Feb-2019 12:31:49	4793.666	4793.666
DWOB_BETA	5.68	16-Feb-2019 12:31:49	17-Feb-2019 11:14:07	4793.666	4804.74
DWOF		14-Feb-2019 21:47:33	16-Feb-2019 07:58:52	4779.442	4793.666
DWOF	-447.05	16-Feb-2019 07:58:52	16-Feb-2019 12:31:31	4793.666	4793.666
DWOF	-1011.97	16-Feb-2019 12:31:31	16-Feb-2019 12:31:49	4793.666	4793.666
DWOF	-442.6	16-Feb-2019 12:31:49	17-Feb-2019 11:14:07	4793.666	4804.74
DWOB_ZEROTOOLP		14-Feb-2019 21:47:33	16-Feb-2019 07:58:52	4779.442	4793.666
DWOB_ZEROTOOLP	1.33	16-Feb-2019 07:58:52	16-Feb-2019 12:31:31	4793.666	4793.666
DWOB_ZEROTOOLP	1.37	16-Feb-2019 12:31:31	16-Feb-2019 12:31:49	4793.666	4793.666
DWOB_ZEROTOOLP	1.37	16-Feb-2019 12:31:49	17-Feb-2019 11:14:07	4793.666	4804.74

Pass Ream Down 1

DWOB_BETA	5.88	16-Feb-2019 08:01:15	16-Feb-2019 12:31:31	4785.208	4790.364
DWOB_BETA	5.7	16-Feb-2019 12:31:31	16-Feb-2019 12:31:49	4790.364	4790.364
DWOB_BETA	5.68	16-Feb-2019 12:31:49	16-Feb-2019 13:46:21	4790.364	4793.666
DWOF	-447.05	16-Feb-2019 08:01:15	16-Feb-2019 12:31:31	4785.208	4790.364
DWOF	-1011.97	16-Feb-2019 12:31:31	16-Feb-2019 12:31:49	4790.364	4790.364
DWOF	-442.6	16-Feb-2019 12:31:49	16-Feb-2019 13:46:21	4790.364	4793.666
DWOB_ZEROTOOLP	1.33	16-Feb-2019 08:01:15	16-Feb-2019 12:31:31	4785.208	4790.364
DWOB_ZEROTOOLP	1.37	16-Feb-2019 12:31:31	16-Feb-2019 12:31:49	4790.364	4790.364
DWOB_ZEROTOOLP	1.37	16-Feb-2019 12:31:49	16-Feb-2019 13:46:21	4790.364	4793.666

All depth are at tool zero.

Calibration Report	
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Company: JAMSTEC

Well: C0002T

Field: C0002

Rig Name: D/V Chikyu

Prefecture Wakayama

Country: Japan



