

# Drilling Mechanics Log

## DML

# Schlumberger

Single Run Log, Measured Depth 1:500

Company: JAMSTEC

Well: C0002T

Field: C0002

Rig Name: D/V Chiky

Prefecture: Wakayama

Country: Japan

Latitude: 33° 18' 3.042" N

Longitude: 136° 38' 12.174" E

Block:

FL: Pacific Ocean

FL1: X=652382.39m

FL2: Y=3685843.62m

UWID:

Rig Name:

Rig Type:

D/V Chiky

Drill Ship

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: 1:500

Depth Source: Driller's Depth

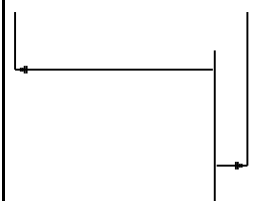
Depth Sensor: DES

Print Type: Final

Spud Date: 26-Oct-2018

Other Services:

Direction and Inclination



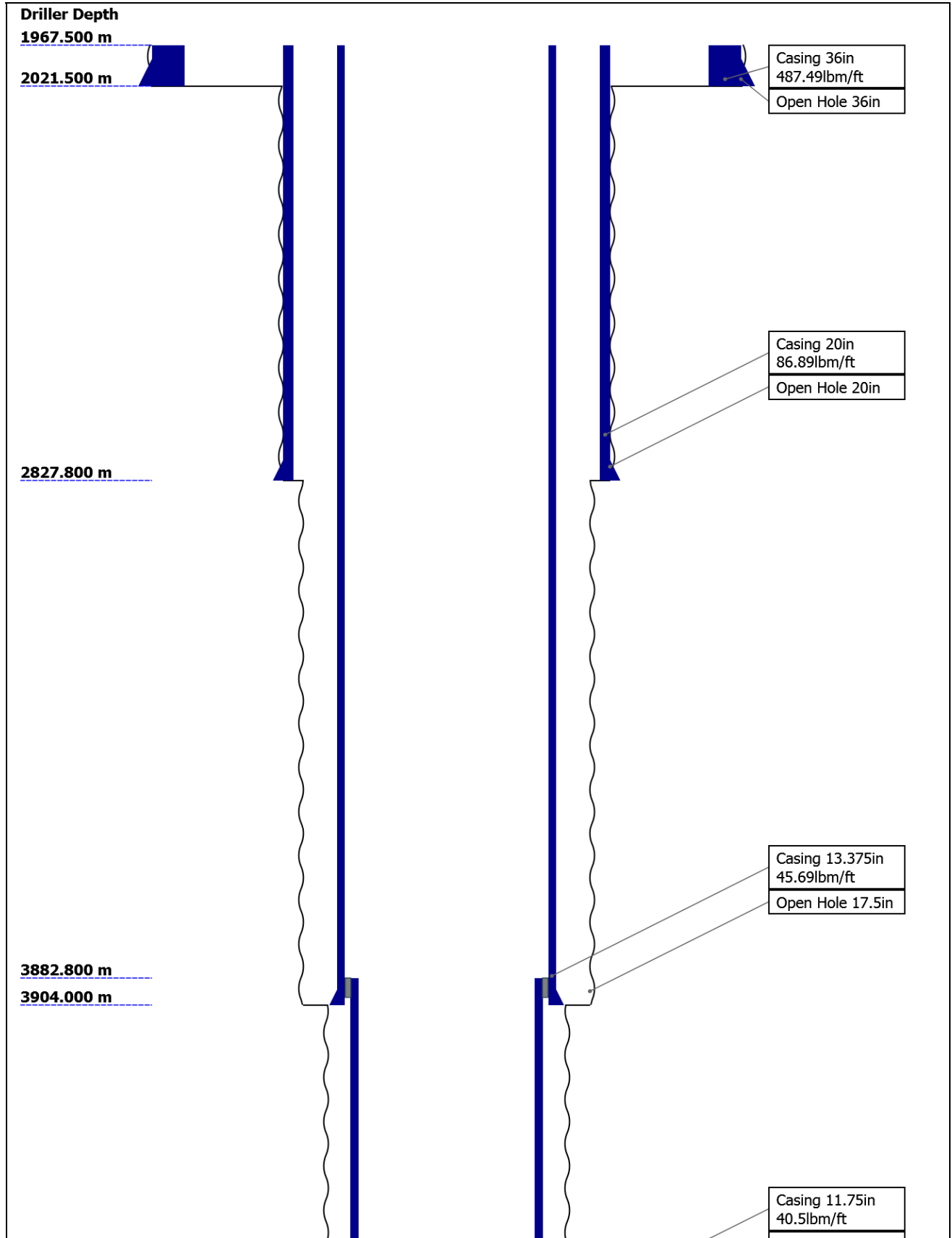
## Disclaimer

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# Well Sketch



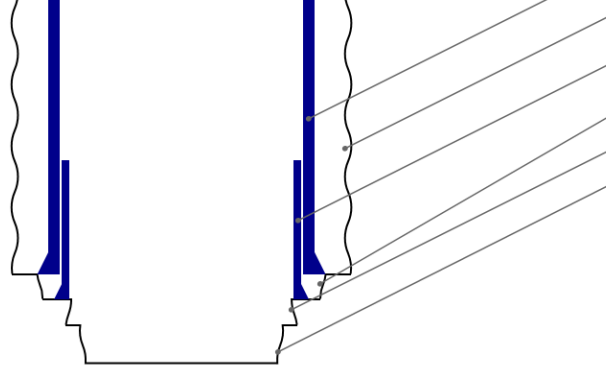
4603.500 m

4756.410 m

4770.220 m

4780.000 m

4804.000 m



Open Hole 14.5in
Casing 10.625in 24.96lbm/ft
Open Hole 12.25in
Open Hole 9.75in
Open Hole 8.5in

## Borehole Size/Casing Record

Bit						
Bit Size ( in )	36	20	17.5	14.5	12.25	9.75
Top Driller ( m )	1967.5	2021.5	2827.8	3904	4756.41	4770.22
Bottom Driller ( m )	2021.5	2827.8	3904	4756.41	4770.22	4780
Casing						
Size ( in )	36	20	13.375	11.75	10.625	
Weight ( lbm/ft )	487.49	86.89	45.69	40.5	24.96	
Inner Diameter ( in )	32	18.75	12.415	10.772	9.95	
Grade	X56	X56	N/A	N/A	N/A	
Top Driller ( m )	1967.5	1967.5	1967.5	3882.8	4603.5	
Bottom Driller ( m )	2021.5	2827.8	3904	4756.41	4770.22	
Bit						
Bit Size ( in )	8.5					
Top Driller ( m )	4780					
Bottom Driller ( m )	4804					
Casing						
Size						
Weight						
Inner Diameter						
Grade						
Top Driller						
Bottom Driller						

## Operational Run Summary


Parameter ( unit )	Run 1				
Date Log Started	14-Feb-2019				
Time Log Started	21:47:33				
Date Log Finished	17-Feb-2019				
Time Log Finished	11:14:07				
Bit Size ( in )	8.500				
Bit Start Depth ( m )	4784.00				
Bit Stop Depth ( m )	4804.00				
Top Log Interval ( m )	4784.00				

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
<p><b>Equip name</b>      <b>Length</b>  <b>NMDC: 6 3/4"[2]</b>    <b>31.99</b>  <b>:KSBD14859</b></p>  <p><b>MP name</b>      <b>Offset</b>  <b>Schlumberger</b></p>	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.
	<p><b>UBHO: 6 3/4":SB</b>    <b>22.51</b>      <b>Schlumberger</b>  <b>D72254</b></p> <p><b>X/O: 6 3/4"[2]:7</b>    <b>21.55</b>      <b>Schlumberger</b>  <b>4ET002-06/02</b></p> <p><b>TELE675-IWOB:B</b>    <b>21.06</b>      <b>Schlumberger</b>  <b>1755</b></p>

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

Fit 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 Azimuth: 202.42 deg  
 True Vertical Depth: 4778.21 m North Displacement: 3.60 m East Displacement: 47.26 m  
 N-S VSec Origin: 0.00 m E-W VSec Origin: 0.00 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

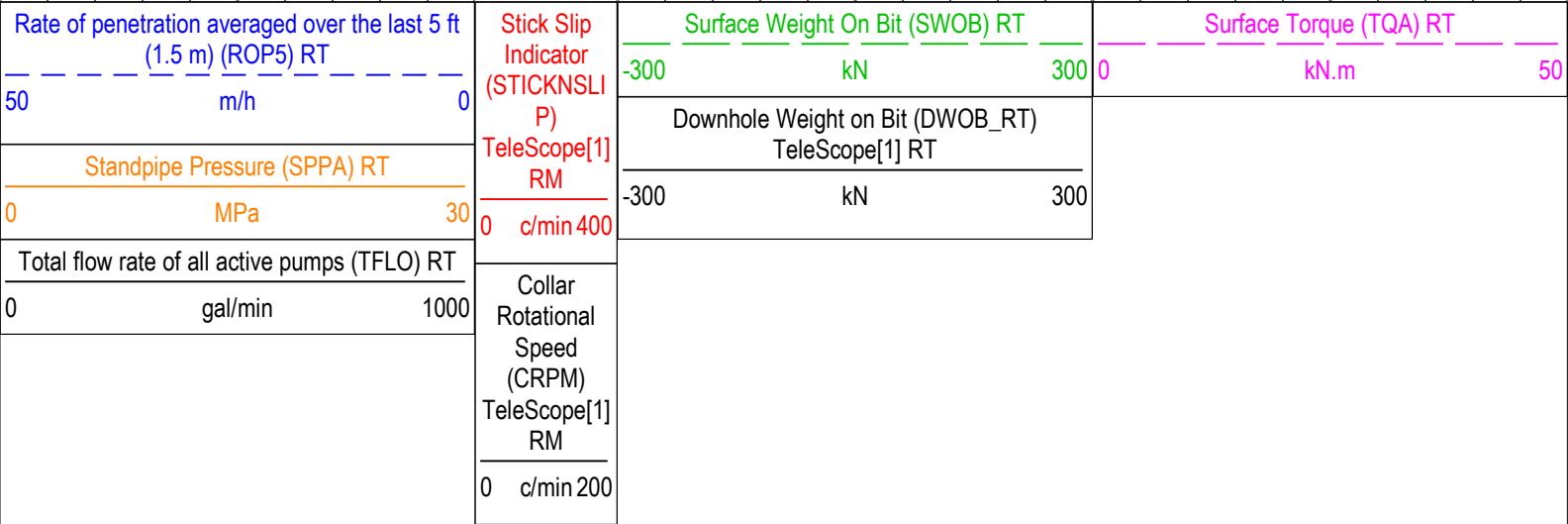
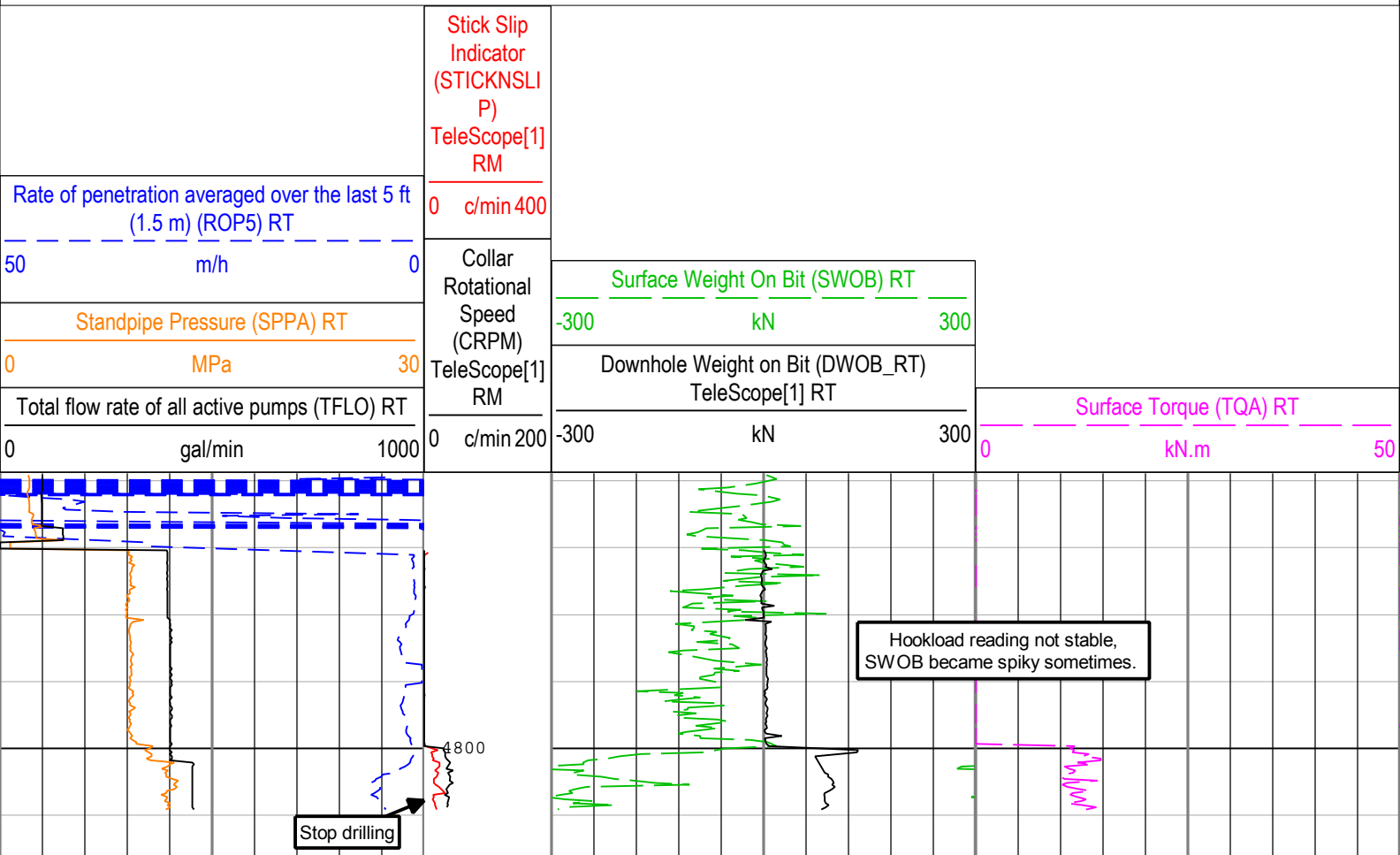
## Software Version

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



### Channel Processing Parameters

#### Run 1: Parameters

Parameter	Description	Tool	Value	Unit
DFD	Drilling Fluid Density	Borehole	1.36	g/cm3

### Tool Control Parameters

#### 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 1 Time 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_ZERO TOOLP		14-Feb-2019 21:47:33	16-Feb-2019 07:58:52	4779.442	4793.666
DWOB_ZERO TOOLP	1.33	16-Feb-2019 07:58:52	16-Feb-2019 12:31:31	4793.666	4793.666
DWOB_ZERO TOOLP	1.37	16-Feb-2019 12:31:31	16-Feb-2019 12:31:49	4793.666	4793.666
DWOB_ZERO TOOLP	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_ZERO TOOLP	1.33	16-Feb-2019 08:01:15	16-Feb-2019 12:31:31	4785.208	4790.364
DWOB_ZERO TOOLP	1.37	16-Feb-2019 12:31:31	16-Feb-2019 12:31:49	4790.364	4790.364
DWOB_ZERO TOOLP	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

**Company:** JAMSTEC  
**Well:** C0002T  
**Field:** C0002  
**Rig Name:** D/V Chikyu  
**Prefecture:** Wakayama  
**Country:** Japan

