THE DOWNHOLE VISUAL ANALYTICS COMPANY

DIMENSION BID

Optis® E-line Job Report

Company	:	Petronas Carigali Sdn Bhd
Field	:	KNNAG
Well	:	KNJT-C4
Country	:	Malaysia
Date Recorded	:	30/12/2023
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1. Executive Summary

Dimension Bid has carried out a downhole video log in KNJT-C4 with the objective to identify the condition of EGF Flapper. The flapper is suspected to be in partially close condition.

Video acquired shows that there is no obstruction of the suspected EGF flapper. Below is image of the flapper at 786 ftTHF.

Fig.1.1 EGF Flapper condition at 786 ft

2. Objective

- To identify the EGF flapper condition.

3. Operation

A surface check of EV's Optis® Infinity Hybrid tool string was done at the surface before the camera ran. Communication through the Dimension Bid wireline was good, with low values of UL EVM and DL EVM errors. However, the optimum setting for the VWT is an 75-bit rate with medium resolution. The camera run was performed on December 30, 2023. The tool was checked at the surface while hanging before running into the hole. When opening the well, water is flushed downhole and the DV camera still to have blur or debris left on lens surface probably due to some grease during filling up water and pressurise inside the lubricator. The SV camera condition is clean, the lubricator is pressurised by pumping fresh water with higher pressure before opening the well. After the communication check was vertically completed and the camera was working well, operations proceeded with RIH and water is pumped at minimum rate.

Note: The tool zero is at THF.

Throughout the camera run, communication from tool was fine and check regularly for DV and SV angle until reaching at TRSV at 786 ft, thou during RIH while pumping the visibility is unclear due

water displacement downhole. Water is then stop pumped at 750ft and waiting for the fluid level to further to lower down until below TRSV.

Fig.3.1 DV Cam at 750ft observe fluid slowly displaced downhole.

On December 30, 2023, the operation continued after the camera passed the surface test. Below is the serial number of the EV Toolstring used for the runs.

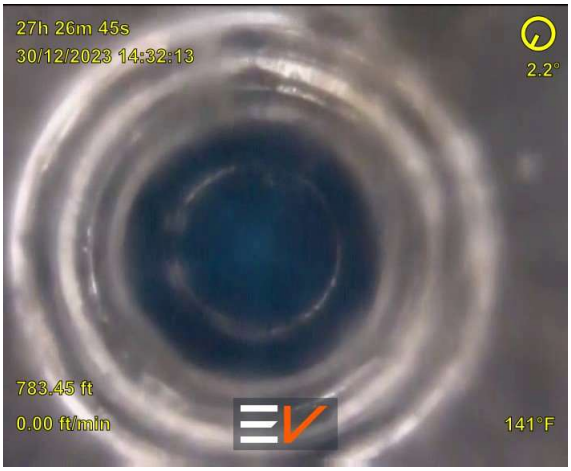
Tool	S/N Run1
AECNTB1GO-A (1-11/16" 6-BLADE BOW SPRING CENTRALISER)	088
EVTELCMK2EL-A (1-11/16" MK2 E-LINE TELEMETRY MODULE)	143
EVXO10B24P-A (1 11/16" CROSSOVER 10 WAY BOX TO 24 WAY PIN)	085
EVMEM24-A (1-11/16" MEMORY MODULE)	080
EVCNTB24K-A (24 WAY M-F BOWSPRING CENTRALISER)	087
EVCAMIDV-A (EV INTEGRATED DOWNVIEW FOR MCSV)	010

Toolstring reached at TRSV 786ft (flapper) and the camera gave a good result during the process. There is no obstacle to the expected EGF Flapper depth of 786 ft only visualise that the flowtube is not fully travel. WSS then agreed to POOH, and the video of accessories was taken from 787ft - 783ft.

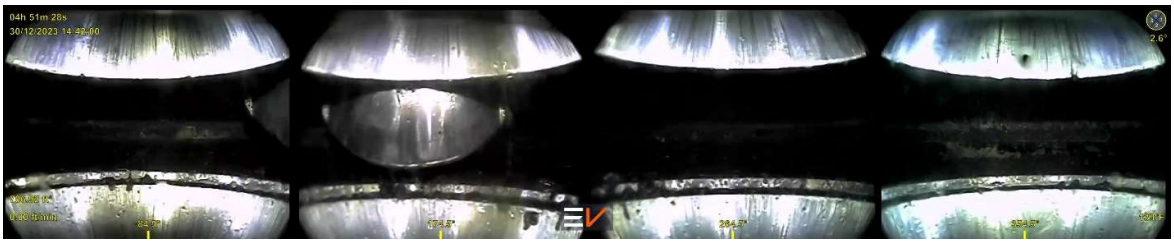
DV at 785ft

SV at 786ft flapper

DV at 787ft



DV at 783ft

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30/12/2023 14:31:31
2.2°


04h 40m 41s
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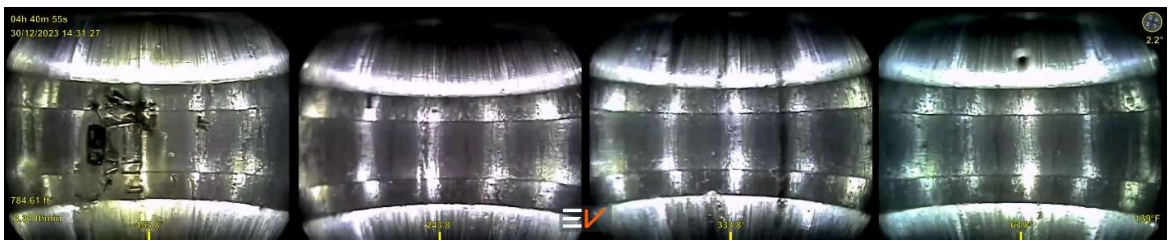
2.2°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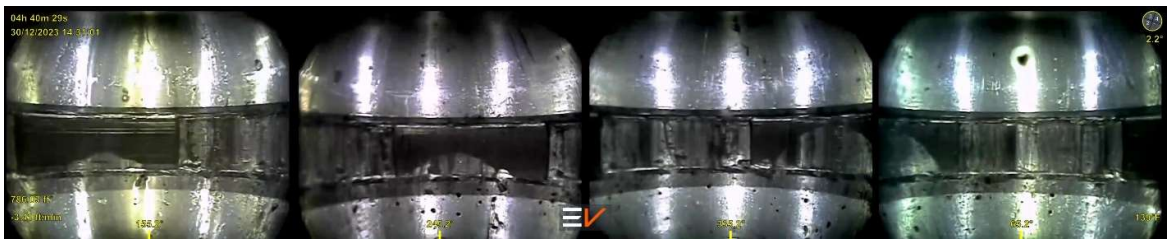
784.61 ft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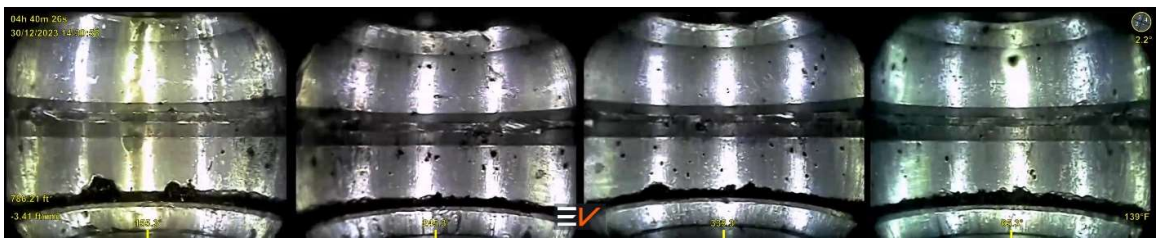
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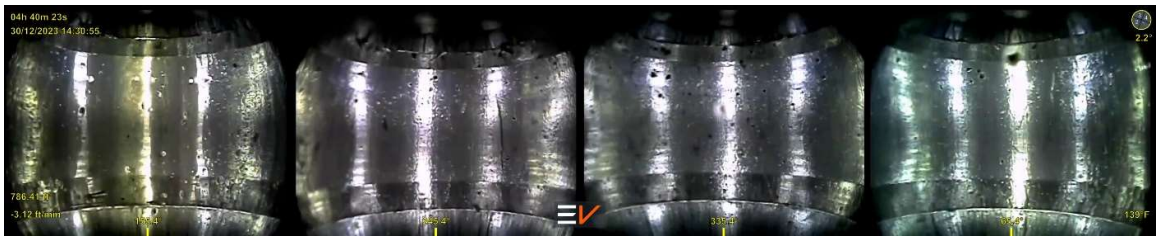
139°F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30/12/2023 14:30:55
2.2°
139°F

4. Conclusion

The operation was carried out successfully and images of the EGF Flapper and the HUD were acquired.

Video footage shows that there is no obstruction from the EGF Flapper that suspected to be in partially close condition.

The deepest depth of the camera survey is 787 ft (DV). No anomaly was found during log down to 787 ft.

The operation was carried out safely and all the hazards had been addressed to prior commencing the operation.

5. Appendix

5.1. Well Schematic

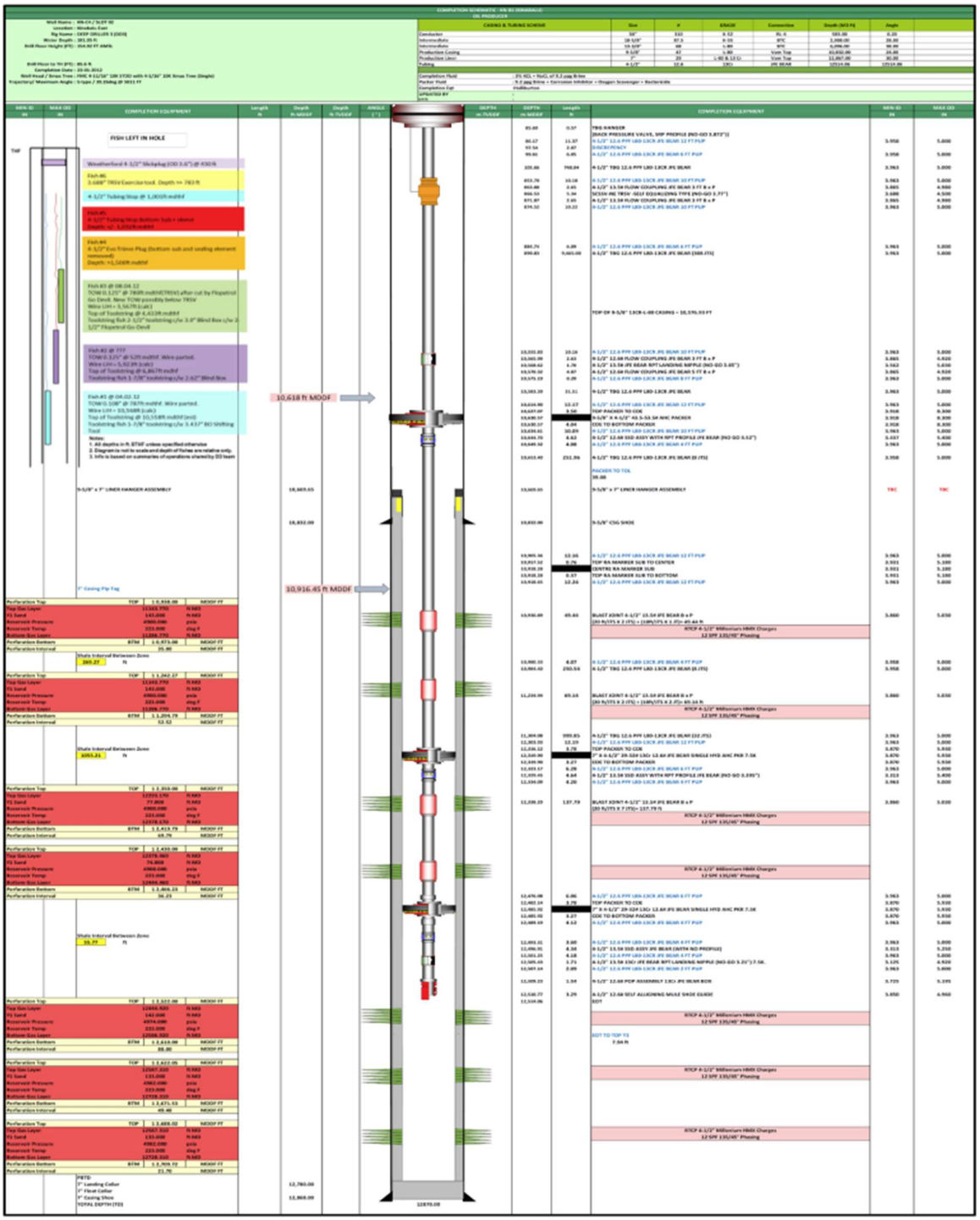

Fig 5.1

5.2. Tool Diagram

Tool String Listing

Date:	11-May-23		
Completed By:	Aldri DP		
Company:	Exxon Mobile Cepu Ltd	**Company Rep:**	
Well Name:	G2C	**UWI:**	
Field:		**Surface Location:**	
Province/State:	East Java	**Ticket/Job Ref:**	

Tool Discription	OD	Weight	Length	Tool Type	Model	Top Connection	Bottom Connection	Diagram
BHA Tool Listing	**In**	**lbs**	**ft**					
Bow Spring Centralizer - 6 Blades	1.70	14.10	2.62	Centralizer	Optis E-Line	Go box up	Go pin down	
Telemetry	1.70	18.78	3.66	Telemetry	Optis E-Line	Go box up	EV-L pin down	
X-Over 10 pin	1.70	4.60	0.42	X-Over	Optis E-Line	EV-U box up	EV-L pin down	
Bow Spring Centralizer - 6 Blades	1.70	6.90	2.69	Centralizer	Optis E-Line	EV-U box up	EV-L pin down	
Motor (with drip sleeve)	2.13	9.10	1.63	Motor	Optis E-Line	EV-U box up	EV-L pin down	
Side View Camera	1.70	4.60	1.17	Camera	Optis E-Line	EV-U box up	EV-L pin down	
X-Over 9 pin	1.70	2.40	0.14	X-Over	Optis E-Line	EV-U box up	EV-L pin down	
Down View Camera	1.70	3.64	0.92	Camera	Optis E-Line	EV-U box up	Camera lens	

Total Length:	13.26	ft
Total Weight:	64.1	lbs
Maximum Tool OD:	2.125	In

Remarks:

1. The above only includes the EV portion of the BHA / Wireline Deployment tools will also be included via the wireline provider (Weight bars / cableheads)
2. Centraliser type = Fleksible bow spring centraliser with fleksible blade, OD min 1,69 in, OD max 7,6 in

Fig 5.2

5.3. Run Summary

Run	Date	Details
1	30-12-2023	Optis HD E-line Standard

5.4. Run Report

Tool	S/N Run Eline
AECNTB1GO-A (1-11/16" 6-BLADE BOW SPRING CENTRALISER)	088
EVTELCMK2EL-A (1-11/16" MK2 E-LINE TELEMETRY MODULE)	143
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5.5. Time Sequence of Events

Details Activity (24/10/2023)				
TIME FROM	**TIME TO**	**HOURS**	**CODE**	**DESCRIPTION**
6:00	06:30	0.5	HSE	Attend morning meeting with operation onboard.
6:30	7:00	0.5	HSE	Toolbox meeting with WSS and WIS team onboard
7:00	8:30	1.5	HSE	ePTW revalidation and awaiting for approval.
8:30	9:00	0.5	OPT	Make up EV camera tool, function test tool. Connect additional 2 tungsten weight bar and perform function test.
9:00	10:00	1	OPT	Stab in lubricator section, fill up at 0.8bbl and perform pressure test PCE at 3100psi. Monitor for 15mins and observed no leakage.
10:00	12:45	2.75	OPT	Proceed pumping at minimum rate between 0.15-0.20bbl while rih. Upon reaching 750ft, station tool and stop pumping. Monitor camera condition. Observed that camera still blurry at bottom view and sideview. Sideview observed slight debris. Continue to monitor until well is stabilize and fluid is below flapper.
12:45	13:15	0.5	OPT	Continue rih until SCSSV depth and observed flapper is seen clearly.
13:15	14:00	0.75	OPT	Disscussion with town and commenced to proceed to log for 2 cycle as reference depth. Agreed with flapper image is seen clearly as per EV camera sideview.
14:00	15:00	1	OPT	POOH until reach at depth 430ft and flag cable line. Observed mark at tubing wall. Yoyo at 450ft-430ft while observe tubing wall condition.
15:00	15:30	0.5	OPT	POOH to surface and disconnect tool.
15:30	15:45	0.25	OPT	Rig down pumping line and secure pumping tee.
15:45	16:15	0.5	OPT	Make up slickplug tool and continue to rig up to lubricator section but observed tool hang up at tooltrap.
16:15	16:45	0.5	OPT	Disconnect slickplug and lowerdown upper pce section. Removed tooltrap and test simulate slickplug passing thru.
16:45	17:15	0.5	OPT	Due to time constraint. PCE, well and equipments secured.
17:15	17:45	0.5	JPR	Housekeeping at work area and suspend ePTW.

5.6. Mnemonics

RIH	**Run in Hole**
POOH	**Pull out of Hole**
AOI	**Area of Interest**
OD	**Outer Diameter**
ID	**Inner Diameter**
DF	**Drill Floor**
HUD	**Hold-up Depth**
GL	**Ground Level**
SSSV	**Sub-Surface Safety Valve**
TBT	**Toolbox Talk**
FS	**Field Specialist**
SDI	**Scientific Drilling International**
DV	**Down-View**
SV	**Side-View**
TOL	**Top of Liner**
UMV	**Upper Master Valve**
LMV	**Lower Master Valve**
TD	**Tagged Depth**

6. HD E-line Tool Specification

Optis® E-Line HD is a step change in downhole video technology providing colour, 25 frames per second video, on mono-conductor cables. Colour images provide a new level of detail particularly when inspecting corrosion or mechanical damage.

EV's proprietary telemetry, which runs at over 200 kbps, is combined with video compression technology and error correction to deliver industry leading video quality. The system tunes itself to a wide range of cables so that Optis® Electric Line HD works on virtually any cable length or cable type.

Optis® E-Line HD's modular design means is can be run with downview, sideview or both. Deviation, high side indicator and internal temperature are digitally transmitted to the surface laptop providing essential information when viewing images.

EV's colour downview light head uses the latest in LED technology combined with an optimised lens to give colour pictures of unrivalled quality even in marginal fluid conditions. The LED light intensity can be adjusted to maximise image quality in a wide range of wellbore scenarios. The LED technology is rugged, minimizing susceptibility to shock loading.

SPECIFICATIONS

Diameter	1.7 in	43.0 mm
Length*	147.5 in	3746.8 mm
Pressure rating	15,000 psi	1034 bar
Temperature rating	257 °F	125 °C
Camera Type	Downview (Colour) & 360° Motorised Sideview (Colour)	
Video Frame Rate	Up to 25 fps	
Recording Capacity	Continuous real-time transmission to surface	

*Example tool string