

## ASSESSMENT CHECKLIST

Unit: CAP 1.3 EXECUTE THE WELL SERVICES OPERATIONS

Element: WSS 1.3.3 Install and retrieve downhole assemblies

PC	Description of Performance Criteria	Description of Evidence	Source of evidence			Competence	Remarks
			O/I	SD	Q/A		
a	Safe working practices and agreed safety measures are implemented and maintained in accordance with statutory and operational requirements.	Examine evidence (e.g. PTW, minutes of pre-job safety/toolbox meeting, job hazard analysis worksheet, job report) provided to confirm compliance.  Check candidate's answers to oral/written questions and by direct observation to confirm that he is familiar with : - wireline procedures governing well preparation and equipment rig-up for well entry. - safety precautions to be taken during the well entry work.	✓			C	
b	Downhole assemblies and running/pulling tools are checked and made up in accordance with operational requirements.	Examine evidence (e.g. job report, tools/equipment inventory list).  Check candidate's answers to oral/written questions and by direct observation to confirm his understanding on :- - the operating principles of the various downhole assemblies and running/pulling tools and what are the essential areas to check. - the correct procedures for making up downhole assemblies to their respective running tools.	✓			C	
c	Wireline tools are checked and function tested prior to running in.	Examine evidence (e.g. job report).  Check candidate's answers to oral/written questions and by direct observation to confirm understanding on the correct way of checking and function testing the various wireline tools.	✓			C	

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PC	Description of Performance Criteria	Description of Evidence	Source of evidence			Competence	Remarks
			O/I	SD	Q/A		
d	Surface and downhole equipment is manipulated within agreed operating limits for the work being performed.	<p>Confirm via evidence (e.g. job report, and work action program).</p> <p>Check candidate's answers to oral/written questions, written assignment and by direct observation to confirm :</p> <ul style="list-style-type: none"> <li>- he is familiar with wireline procedures governing the running/pulling of the various types of downhole assemblies.</li> <li>- his knowledge on allowable limits on speed, line tension for the specific job.</li> <li>- his understanding on the correct technique of operating the wireline winch unit.</li> </ul>	✓			C	
e	Faults and defects are accurately identified and appropriate remedial actions taken in accordance with operational requirements.	<p>Confirm via evidence (e.g. job report).</p> <p>Check candidate's answers to oral/written questions and by direct observation to ascertain underpinning knowledge on troubleshooting techniques and ability to rectify faults encountered.</p>	✓			C	
f	Calculations required to ensure safe and effective operation are accurate, and are carried out as necessary.	<p>Confirm via evidence (e.g. job report).</p> <p>Check candidate's answers to oral/written questions and by direct observation to confirm that he understand the importance and need to invoke and apply appropriate calculations for certain aspects of the job.</p>	✓			C	

# DIMENSION BID

Element: CAP 1.3.3 Install and retrieve downhole assemblies

PC	Description of Performance Criteria	Description of Evidence	Source of evidence			Competence	Remarks
			O/I	SD	Q/A	C / NYC	
g	Data is accurately recorded at appropriate times and frequencies in accordance with operational requirements.	Confirm via evidence (e.g. job report). Check candidate's answers to oral/written questions and by direct observation to confirm he understands the importance of recording relevant data with respect to the specific job, e.g. recording of toolstring weight at various mode and depth intervals, monitoring and recording of relevant surface pressures of the well and tagging liquid level in the well.	✓			C	
h	Proper installation of downhole assemblies is confirmed in accordance to operational requirements.	Confirm via evidence (e.g. job report). Check candidate's answers to oral/written questions and by direct observation to confirm he understands and knows what are the tell-tale signs to look to confirm proper setting/installation of the various downhole assemblies.	✓			C	

**Legend:**

Source of Evidence:  O/I Observation / Interview

SD Supporting Document

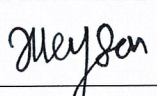
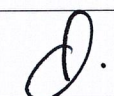
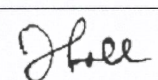
Q / A Written Questions & Answers

Competence  C Competent

NYC Not Yet Competent

OVERALL SCORE	STRONG			ADEQUATE			IMPROVEMENT NEEDED		
	10	9	8	7	6	5	4	3	2
		9							

# DIMENSION BID

<b>Assessed by:</b>  <b>ALLEYSON AKIN</b> DIMENSION BID (M) SDN BHD East Malaysia Operation	<b>Agreed by:</b> (TSO)  Ammar ↑	<b>Verified by:</b> (HOD)  Afiq Ammar
(Name)	(Name)	(Name)
		
Signature	Signature	Signature
20.9.24	20.9.24	10th Oct 2024
Date	Date	Date

## QUESTIONS TO ASSESS UNDERPINNING KNOWLEDGE (Written/Oral Answers Required)

Unit: CAP 1.3 EXECUTE THE WELL SERVICES OPERATION

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No.	Question	Relevant PC
1	How do you prepare a well for wireline entry, with respect to the platform shutdown system? Why is it important to do that?	a
2	For the wireline diesel power pack to operate in Zone 2 Hazardous Areas, and as per EEMUA 107, what are the safety features that are required to be incorporated into the power pack.	a, e
3	What are the checks that should be carried out prior to running an 'XX' or 'RR' ('XN or 'RN') lock mandrel? Name five.	b, e
4	What are the two positions you can select to run the 'XX' or 'RR' lock mandrel? Describe the two positions with respect to the Keys and Fishing neck.	b
5	What fishing neck size will the following tools latch :- 1. 1.1/2" RB 2. 2" RS 3. 2.1/2" SB 4. 3" RS	b
6	What are the checks that should be carry out on the 6" Camco WRDP-2 WR SC-SSV prior to assembling it to its running tool? Name six.	b, e
7	Describe, with the aid of a diagram, how a hydraulic jar works.	c
8	What is the recommended model 'XO' running tool used for running the 2.813" 'FXE' WR SC-SSV? Can the standard 2.75" 'XO" running tool (Assy No. 41XO66) be used to run and install the Otis 'FXE' WR SC-SSV.  Explain your answer and highlight the precaution(s) associated with the use of this tool to install the valve.	a, d, e
9	What is the difference between the overload type (A) and the plain type (B) slips used in conjunction with the 3/16" Slip-type braided line Rope socket?  How many types of breaking strength slips are available and what are they?	c, e, g
10	What are the essential checks that should be carried out before assembling a wireline toolstring? Name six.	c, e
11	What are the areas to be checked to confirm that a rope socket is fit for use? Name four.	c, e
12	What are the areas to be checked on a link jar prior to use? Name four.	c, e
13	Describe how to make up, run, set and test a WR SC-SSV. You can choose the type and either an oil well or a gas well. Also highlight the tell-tale signs in terms of tool, wireline and pressure indications to confirm that the valve has	b, d, h

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	been properly set and installed.	
14	Describe how to make up, run, set and test a downhole plug. You can choose the type and either an oil well or a gas well. Also highlight the tell-tale signs in terms of tool, wireline and pressure indications to confirm that the plug has been properly set and installed.	b, d, h
15	Describe how to retrieve a WR SC-SSV. You can choose the type and either an oil well or a gas well.	d
16	Describe how to retrieve a down hole plug, assuming there is some sand or debris on top of the plug. You can choose the type and either an oil well or a gas well.	d, e
17	In a vertical well, you are to equalize and pull a 3" plug at 7656'. Reservoir pressure = 2800 psig. Liquid level is detected at 1867'. Liquid gradient of well = 0.28 ppf. CITHP = 980 psig.  Ignoring pressure exerted by the gas column and assuming that the liquid level remains unchanged, calculate the final CITHP after you have RIH and have properly equalized the plug. Show the mathematical steps on how you arrived at your answer.	f
18	What is the most appropriate instrument you can use to monitor pressure(s) during a plug equalization process, and state the advantages over a conventional pressure gauge?	g
19	How do you confirm that a WR SC-SSV is properly set or installed in its landing nipple with respect to tool, wireline and pressures indication?	h
20	How do you confirm that a downhole plug is properly set or installed in its landing nipple with respect to tool, wireline and pressures indication?	h
21	What is the purpose of doing a job hazard analysis prior to carrying out a wireline operation and what are the three areas you have to identify?	a
22	Why is the wireline operating vicinity cordoned off during wireline operations?	a
23	For all wireline well entry work it is mandatory for the control of the SSV to be transferred to the well services SWCP. Why and where should the SWCP be placed?	a
24	At what PPM is the personal H <sub>2</sub> S detector used in SSB/SSPC set to activate?	a
25	What is the acceptable range of the No-Go ring OD of the 3" 'C' lock mandrel and what other checks should be carried out on the No-Go ring prior to assembling the B7 valve to its running tool?	b, g
26	What is the acceptable minimum force required to retract the fishing neck of the Camco 'C' lock?	b, e, g
27	Explain why the use of pipe wrenches are not permitted on the 'Lock Adaptor' of the Camco 3" B7 valve?	b, e
28	What is the toolstring configuration required to retrieve a 6" Camco WRDP-2 WR SC-SSV?	b

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29	What is the purpose of the 'Garter Spring' in the Camco Z-6 running tool and where should its position be when assembling the running tool to the Camco DB-6 lock mandrel?	b
30	How many shear pins should be installed in a Otis "GR" pulling tool. Explain your answer.	b, e
31	In what ways are the Otis 'RB', 'RJ' and 'RS' pulling tools different, and what fishing neck size would you find on a 2" and 3" 'RS' pulling tool?	b
32	Can the dogs on the Otis 'SB' pulling tool be interchanged with that of a 'RS' pulling tool? Explain your answer.	b, e
33	What is the function of the pawls in the Camco 'JDC' and 'JUC' pulling tools, and how many pawls are there in the 3" pulling tool?	b, e
34	What is the difference between the following plug chokes? a. 'XX' plug and 'PX' plug b. 'XN' plug and 'PRN' plug	b, e
35	What is the difference between the following pulling tools? a. 'GS' and 'GSL' b. 'GR' and 'GRL'  Which is the recommended pulling tool for pulling the Otis 'FXE' valve and the Camco internal fishing neck B7 valve?	b, e
36	When and why are stretch simulators or accelerators used?	a, c
37	What is the purpose of a knuckle joint and state the precautions to be taken when using it?	c
38	Is it necessary to tap down on the pulling tool to latch onto the B7 valve? Why? If latch on could not be achieved would you tap down to effect latch on? Explain your answer.	a, d, e
39	How do you ensure that the shear pin in the 'XO' running tool is not prematurely sheared when working through a SSD or landing nipple?	d
40	Why are calculations of lubricator and toolstring length paramount for a safe and productive wireline well entry work?	f
41	What is hydrostatic pressure and what is the basic mathematical formula for calculating hydrostatic pressure in a well, given density and height or depth of liquid column?	f
42	When working on a well, either single or dual, what are the pressures required to be taken?	g