

International Well Control Forum

Well Intervention Pressure Control Certification Syllabus

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International Well Control Forum – Well Intervention Pressure Control, Completion Equipment Syllabus

Ref.	Standard	Performance Criteria	Level. 1	Level. 2
WA.01	Know the function, application and positioning of production packers.	Describe the primary function, application and positioning of packers.	X	X
WA.02	Know the generic types of packers commonly used.	Describe the types of production packers i.e. retrievable or permanent.	X	X
WA.03	Know the function, application and position of circulation and communication devices (non-Side pocket mandrels) between tubing and annulus.	Describe the primary function of the circulation and communication devices (sliding sleeves and ported nipples).	X	X
WA.04	Know the function, application and position of side pocket mandrels.	Describe the primary function of side pocket mandrels, either with a working valve (gas lift, circulation, and chemical injection) or with a dummy valve installed.	X	X
WA.05	Understand the operations required to establish circulation through all down-hole circulation and communication devices	Describe the manipulation of all circulation and communication devices with respect to pressure control.	X	X
WA.06	Know the application of sub-surface safety valves.	Describe the primary function, applications and positioning of sub-surface safety valves.	X	X
WA.07	Know the different types of sub-surface safety valves.	Recognise and describe the advantages/disadvantages of: a) Maximum tool size versus DHSV ID, requirements and possibilities of pulling DHSV's before intervention and use of wear sleeves or lock out devices. b) Sub-surface controlled sub-surface safety valves (differential pressure design or ambient pressure design). c) Surface controlled sub-surface safety valves (wireline retrievable and tubing retrievable).	X	X
WA.08	Know the function and position of landing nipples.	Describe the primary function and positioning of landing nipples.	X	X

International Well Control Forum – Well Intervention Pressure Control, Completion Equipment Syllabus

Ref.	Standard	Performance Criteria	Level. 1	Level. 2
WA.09	Know the function of tubing hangers.	Describe the primary function of tubing hangers, i.e.: a) Seal off annulus; b) Support tubing weight; c) Provide locking or threaded profile for THP	X	X
WA.10	Know the purpose and function of Xmas trees in relation to pressure control.	Describe the primary function of Xmas tree with particular emphasis on: a) Master, swab and flow line valves; b) Hanger nipple sealing mechanisms; c) Wireline cutting ability. d) Surface safety valve (SSV). e) Control line pressure versus tubing pressure.	X	X

International Well Control Forum – Well Intervention Pressure Control, Wireline & Cable Equipment Syllabus

Ref.	Standard	Performance Criteria	Level. 1	Level. 2
WB.01	Know the specialised equipment related to pressure control during Wireline/Cable operations.	Describe the function of surface pressure control equipment and tools specific for wireline/cable operations.	X	X
WB.02	Understand the correct function and method of Installation of surface pressure control components required for the operation.	Given a stack configuration, be able to identify surface pressure control elements in a hook-up and describe correct test procedures.	X	X
WB.03	Understand the issues surrounding the positioning of wireline BOPs in the pressure control rig-up.	Describe and explain positioning.	X	X
WB.04	Understand the issues surrounding the positioning and number of BOPs to be used in a wireline/fishing operation.	Describe and explain positioning.	X	X
WB.05	Understand the circumstances when a wireline BOP would be brought into use.	Describe three major circumstances when a wireline BOP would be brought into use.	X	X
WB.06	Understand the principles of operation of a Grease Control Head.	Given a diagram of a grease control head identify the components and their function.	X	X
WB.07	Know the function of a Ball Check Valve.	Describe when and why a Ball Check Valve would be installed in a lubricator system.	X	X
	BOPs			
WB.08	Understand the principles of operation of a Manual Slickline BOP.	Describe the major components and the operating principles.	X	X
WB.09	Understand the principles of operation of a Hydraulic Slickline BOP.	Describe the major components and the operating principles.	X	X
WB.10	Understand the principles of operation of a Braided Line BOP.	Describe the major components and the operating principles.	X	X
WB.11	Understand what well intervention operations can be carried out with a given stack configuration.	Given a specific equipment rig-up (surface equipment diagram), state which operations can, or cannot, be carried out.	X	X
	Ram Type Preventers/Valves			
WB.12	Distinguish between sealing elements and know how to install and operate them correctly.	Recognise the different types of sealing elements on schematic drawings and answer questions about proper installation (e.g.; including any lubrication that may be required).	X	X

International Well Control Forum – Well Intervention Pressure Control, Wireline & Cable Equipment Syllabus

Ref.	Standard	Performance Criteria	Level. 1	Level. 2
WB.13	Recognise the BOP ram equipment, its pressure rating and correct installation procedure and use.	Describe operating principles (i.e. closing and operating sequences, well pressure assistance on the closure, operating pressures, lining up and hydraulic connections, etc.).	X	X
		Distinguish between the different ram types in use for the various operations, i.e. blind, slick-line and braided line rams.	X	X
WB.14	Recognise when the ram equipment must be changed for a specific operation.	Given the pressure control equipment configuration, a description of the ongoing operations and a description of the next operation, analyse which ram equipment has to be changed and why.	X	X
WB.15	During a BOP element change, recognise defects that could affect the serviceability of the part(s).	Recognise critical seals and parts that may have failed through wear. Understand requirements for replacing it.	X	X
WB.16	Assess the extent of any damage to the equipment and be able to take the right corrective action.	Understand the effects of damage to the equipment (e.g. lubricators, risers, ram blocks, etc.)	X	X
WB.17	Blind Shear Preventers Recognise the limitations of shear ram equipment.	Describe some of the limitations.	X	X
WB.18	Stuffing Box and Lubricator Distinguish between sealing elements and know how to install and operate them correctly.	Recognise different types of sealing elements on schematic drawings and describe proper installation and use. Analyse questions about operating principles (i.e. well pressure assistance on closing, operating pressures, hydraulic connections etc.)	X	X
WB.19	During a packing element change, recognise defects that could affect the serviceability of the part(s).	Recognise critical seals that may have failed through wear. Understand the requirement for replacing it.	X	X
WB.20	Understand the operating requirements of Riser and Lubricator Sections including pressure monitoring and bleed off systems.	Given a diagram of a lower lubricator section, identify the components and their function. Describe how you would determine that it was fit for use.	X	X
WB.21	Understand the principles of operation of a Slickline Stuffing Box.	Indicate whether or not the stuffing box would seal if the wire were not present.	X	X

International Well Control Forum – Well Intervention Pressure Control, Wireline & Cable Equipment Syllabus

Ref.	Standard	Performance Criteria	Level. 1	Level. 2
WB.22	Understand the principles of operation of a mechanical type Slickline Stuffing Box.	a. Given a diagram of a mechanical type stuffing box, identify the components and their function. b. Describe how to regain a seal on the wire following a leak.	X	X
WB.23	Understand the principles of operation of a hydraulic type Slickline Stuffing Box.	a. Given a diagram of a hydraulic type stuffing, identify the components. b. Explain how to regain a seal on the wire following a leak.	X	X
WB.24	NIPPLING/RIGGING UP PROCEDURE Know which items of a specified rig-up require to be properly checked and prepared prior to installation, particularly critical sealing surfaces.	Given a specification for a rig-up. List the proper preparation procedure for the equipment.	X	X
WB.25	Know which adapters and connectors are needed to ensure compatibility between the equipment in use, i.e. pressure rating, dimensions etc.	Given information of the installation, specify which equipment will be required to complete a competent hook-up.	X	X
WB.26	TESTING Understand the requirements for pressure testing.	Given details of a specific operation, including surface or sub-surface equipment, describe pressure-testing procedures.	X	X
WB.27	Understand the correct test procedures for a given equipment rig-up. In particular, know the correct actions to pressure test a valve or BOP function consistent with the direction of the well bore.	Given information on a specific equipment arrangement, identify possible wrong test operations.	X	X
WB.28	Know how a preventer or valve can be pressure tested with wireline in place.	Describe the pressure testing procedure for a preventer or valve with wire in place.	X	X
WBE.06	Understand the principle of grouping barriers into primary, secondary and tertiary systems.	Given a well system diagram, identify primary, secondary and tertiary systems.	X	X
WBG.03	In an emergency situation, know how to quickly and safely shut the well in with tools in the well.	Describe the procedures required to shut in the well with tools or wire-line in the hole.	X	X

International Well Control Forum – Well Intervention Pressure Control, Coiled Tubing Equipment Syllabus

Ref.	Standard	Performance Criteria	Level. 1	Level. 2
WC.01	Know the function and installation of the pressurised 'deployment' system.	Describe the function and installation of the pressurised deployment system, including the deployment of guns and pump through tools.	X	X
WC.02	Understand the requirements for and the use of Check Valves in Coiled Tubing operations.	Analyse questions on the use, advantages, disadvantages, positioning and testing of Check Valves.	X	X
WC.03	Understand the requirements for and the use of alternative and additional internal well control devices in Coiled Tubing.	Analyse questions on the use of various Coiled Tubing alternative and additional internal well control devices (e.g. pump out devices), their advantages and disadvantages.	X	X
WC.04	Know the operating principles of Coiled Tubing Strippers.	Identify and describe the operating principles and limitations of Coiled Tubing Strippers: a) Conventional. b) Side Door. c) Radial	X	X
WC.05	BOPs Know the operating principles of Coiled Tubing BOPs	Identify and describe the operating principles and limitations of Coiled Tubing BOPs: a) Quad type. b) Combi type. c) Shear/Seal d) Triple BOP	X	X
WC.06	Know the circumstances under which a Shear/Seal BOP should be installed.	Describe where and why a Shear/Seal BOP should be installed.	X	X
WC.07	Know the circumstances under which an annular BOP should be installed.	Describe where and why an annular BOP should be installed.	X	X
WC.08	Understand what well intervention operations can be carried out with a given stack configuration.	Given a specific equipment rig-up, state which operations can, or cannot be carried out.	X	X
WC.09	Ram Type Preventers Distinguish between sealing elements and know how to install and operate them correctly.	Recognise the different types of sealing elements of schematic drawings and describe operating characteristics.	X	X

International Well Control Forum – Well Intervention Pressure Control, Coiled Tubing Equipment Syllabus

Ref.	Standard	Performance Criteria	Level. 1	Level. 2
WC.10	Recognise the BOP ram equipment, its pressure rating and correct installation procedure and use.	Describe operating principles (i.e. closing and operating sequences, well pressure assistance on the closure, operating pressures, lining up and hydraulic connections, etc.).	X	X
WC.11	Recognise when the ram equipment must be changed for a specific operation.	Distinguish between the different ram types in use for the various operations, i.e. shear, blind, blind/shear, pipe, variable bore, eccentric pipe and slip rams. Given the pressure control equipment configuration, a description of the ongoing operations and a description of the next operation, analyse which ram equipment has to be changed and why.	X	X
WC.12	During a BOP element change, recognise defects that could affect the serviceability of the part(s).	Recognise critical seals and parts that may have failed through wear. Understand requirements for replacing it.	X	X
WC.13	Assess the extent of any damage to the equipment and be able to take the right corrective action.	Understand the effects of damage to the equipment (e.g. lubricators, risers, ram blocks, etc.)	X	X
WC.14	Blind Shear Preventers Recognise the limitations of shear ram equipment.	Describe some of the limitations.	X	X
WC.15	Annular Preventers and Strippers Distinguish between sealing elements and know how to install and operate them correctly.	a) Recognise different types of sealing elements on schematic drawings and describe proper installation and use. b) Describe operating principles (e.g. well pressure assistance on closing, operating pressures, hydraulic connections etc.)	X	X
WC.16	During a packing element change, recognise defects that could affect the serviceability of the part(s).	Recognise critical seals that may have failed through wear. Understand the requirement for replacing it.	X	X
WC.17	Valves Understand the function, positioning and use of valves in relation to pressure control (including check valves).	Analyse questions about correct operation and usage of primary pressure control valves, their location, operating mechanisms, number, etc	X	X
WC.18	Understand the principles of adjustable and fixed chokes, when they should be used and their function.	Analyse questions about the different choke types, when they should be used and their positioning.	X	X

International Well Control Forum – Well Intervention Pressure Control, Coiled Tubing Equipment Syllabus

Ref.	Standard	Performance Criteria	Level. 1	Level. 2
WC.19	<p>Nippling/Rigging Up Procedure Know which items of a specified rig-up require to be properly checked and prepared prior to installation, particularly critical sealing surfaces.</p>	<p>Given a specification for a rig-up. List the proper preparation procedure for the equipment.</p>	X	X
WC.20	<p>Know which adapters and connectors are needed to ensure compatibility between the equipment in use, i.e. pressure rating, dimensions etc.</p>	<p>Given information of the installation, specify which equipment will be required to complete a competent hook-up.</p>	X	X
WC.21	<p>Testing Understand the requirements for pressure testing.</p>	<p>Given details of a specific operation, including surface or sub-surface equipment, describe pressure-testing procedures.</p>	X	X
WC.22	<p>Understand the correct test procedures for a given equipment rig-up. In particular, state the correct actions to pressure test a BOP consistent with the direction of the well bore flow.</p>	<p>Given a diagram of a specific equipment arrangement, identify possible wrong test procedures.</p>	X	X
WC.23	<p>Know how a preventer can be pressure tested with tubulars in place.</p>	<p>Describe the pressure testing procedure for a preventer with tubing in place.</p>	X	X
WCG.03	<p>In an emergency situation, know how to quickly and safely shut the well in with tools in the well.</p>	<p>Describe the procedures required to shut in the well with tools, or tubing in the hole.</p>	X	X
WCH01	<p>Know how to select kill pump rates.</p>	<p>Describe the effects of different kill pump rates on well bore pressures and on well-bore conditions, consistent with the formation strength, annulus friction loss, well-bore conditions and fluid-handling capacity of the surface disposal system.</p>	X	X
WCI.05	<p>Know how to detect the occurrence of pinhole leaks and understand the consequences.</p>	<p>Know how to detect a pinhole leak, the steps that must be taken to isolate it and how to get out of the hole again.</p>	X	X

International Well Control Forum – Well Intervention Pressure Control, Snubbing Equipment Syllabus

Ref.	Standard	Performance Criteria	Level. 1	Level. 2
WD.01	BOPs Know the operating principles of Snubbing BOPs.	Identify and describe the operating principles and limitations of:- a) Annular BOPs b) Stripping BOPs c) Ram type (safety) BOPs d) Blind/Shear BOPs	X	X
WD.02	Know the specific requirements for changing worn elastomers and temporary suspension of work.	a. Describe the steps to be taken to make the well safe when hanging off: - i. Changing the stripper rubber. ii. Changing the stripping ram inserts. iii. Shutting down for the night. b. Recognise surface equipment limitations	X	X
WD.03	Know the circumstances under which a shear/seal BOP should be installed.	Describe when and where a shear/seal BOP should be installed.	X	X
WD.04	Understand what well intervention operations can be carried out with a given stack configuration.	Given a specific equipment rig-up, state which operations can, or cannot, be carried out.	X	X
WD.05	Ram Type Preventers/Valves Distinguish between sealing elements and know how to install and operate them correctly.	Recognise the different types of sealing elements on schematic drawings and answer questions about proper installation (e.g.; including any lubrication that may be required).	X	X
WD.06	Recognise the BOP ram equipment, its pressure rating and correct installation procedure and use.	Describe operating principles (i.e. closing and operating sequences, well pressure assistance on the closure, operating pressures, lining up and hydraulic connections, etc.). Distinguish between the different ram types in use for the various operations, i.e. shear, blind, blind/shear, pipe, variable bore, eccentric pipe and slip rams.	X X	X X

International Well Control Forum – Well Intervention Pressure Control, Snubbing Equipment Syllabus

Ref.	Standard	Performance Criteria	Level. 1	Level. 2
WD.07	Recognise when the ram equipment must be changed for a specific operation.	Given the pressure control configuration, a description of the ongoing operations and a description of the next operation, analyse which ram equipment has to be changed and why.	X	X
WD.08	During a BOP element change, recognise defects that could affect the serviceability of the part(s).	Recognise critical seals and parts that may have failed through wear. Understand requirements for replacing it.	X	X
WD.09	Assess the extent of any damage to the equipment and be able to take the right corrective action.	Understand the effects of damage to the equipment (e.g. lubricators, risers, ram blocks, etc.)	X	X
WD.10	Blind Shear Preventers Recognise the limitations of shear ram equipment.	Describe some of the limitations.	X	X
WD.11	Annular Preventers and Stripper Bowls Know the operating principles of stripper rubbers.	Identify and describe the operating principles and pressure limitations of stripper rubbers; both single and dual.	X	X
WD.12	Distinguish between sealing elements and know how to install and operate them correctly.	Recognise different types of sealing elements on schematic drawings and describe proper installation and use. Analyse questions about operating principles (i.e. well pressure assistance on closing, operating pressures, hydraulic connections etc.)	X	X
WD.13	During a packing element change, recognise defects that could affect the serviceability of the part(s).	Recognise critical seals that may have failed through wear. Understand the requirement for replacing same.	X	X
WD.14	Valves Understand the function, positioning and use of valves in relation to pressure control.	Analyse questions about correct operation and usage of primary pressure control valves, their location, operating mechanisms, number, etc	X	X
WD.15	Understand the requirements for and the use of Back Pressure Valves in Snubbing operations.	Describe the advantages, and disadvantages, positioning and testing of Back Pressure Valves.	X	X
WD.16	Understand the requirements for and the use of alternative and additional internal well control devices in Snubbing operations.	Describe the use of various alternative and additional internal well control devices (e.g. stabbing valves, BOPs, pump down Plugs, pump out devices, etc.), and their advantages and disadvantages.	X	X

International Well Control Forum – Well Intervention Pressure Control, Snubbing Equipment Syllabus

Ref.	Standard	Performance Criteria	Level. 1	Level. 2
WD.17	Understand the principles of adjustable and fixed chokes, when they should be used and their function.	Analyse questions about the different choke types, when they should be used and their positioning.	X	X
WD.18	Nippling/Rigging Up Procedure Know which items of a specified rig-up require to be properly checked and prepared prior to installation, particularly critical sealing surfaces.	Given a specification for a rig-up. List the proper preparation procedure for the equipment.	X	X
WD.19	Know which adapters and connectors are needed to ensure compatibility between the equipment in use, i.e. pressure rating, dimensions etc.	Given information of the installation, specify which equipment will be required to complete a competent hook-up.	X	X
WD.20	Testing Understand the requirements for pressure testing.	Given details of a specific operation, including surface or sub-surface equipment, describe pressure-testing procedures.	X	X
WD.21	Understand the correct test procedures for a given equipment rig-up. In particular, state the correct actions to pressure test a valve or BOP function consistent with the direction of the well bore flow.	Given information on specific equipment rig-ups, identify possible wrong test procedures.	X	X
WD.22	Know how a preventer can be pressure tested with tubulars in place.	Describe the pressure testing procedure for a preventer with tubing in place.	X	X
WDE.06	Understand the principle of grouping barriers into primary, secondary and tertiary systems.	Given a well system diagram, identify primary, secondary and tertiary systems.	X	X
WDG.03	In an emergency situation, know how to quickly and safely shut the well in with tools in the well.	Describe the procedures required to shut in the well with tools or pipe in the hole.	X	X
WDH.01	Know how to select kill pump rates.	Describe the effects of different kill pump rates on well bore pressures and on well-bore conditions, consistent with the formation strength, annulus friction loss, well-bore conditions and fluid-handling capacity of the surface disposal system.	X	X
WDI.05	Know how to detect the occurrence of a string washout and understand the consequences.	Know how to detect a washout, the steps that must be taken to isolate it and how to get out of the hole again.	X	X

International Well Control Forum – Well Intervention Pressure Control, Principles & Procedures Syllabus

Ref.	Standard	Performance Criteria	Level. 1	Level. 2
	Section E, Barrier Principles			
WE.01	Understand barrier principles.	Define the difference between mechanical and fluid barriers.	X	X
WE.02	Understand the principles of mechanical barriers.	Identify and describe the different types of mechanical barriers.	X	X
WE.03	Know how to test mechanical barriers	List the test methods for surface and downhole equipment. List the reference sources for barrier test criteria: - a. Well Programme. b. Operations Manuals. c. API Standards. d. Equipment manufacturer catalogues.	X	X
WE.04	Understand the principles of fluid barriers.	Describe fluid hydrostatic pressure and the relationship with formation pressure; i.e. overbalance.	X	X
WE.05	Understand the principle of multiple barrier protection	Given various well scenarios, identify the appropriate barriers required.	X	X
WE.06	Understand the principle of grouping barriers into primary, secondary and tertiary systems.	Given a well system diagram, identify primary, secondary and tertiary systems.	X	X

International Well Control Forum – Well Intervention Pressure Control, Principles & Procedures Syllabus

Ref.	Standard	Performance Criteria	Theory	Theory
	Section F, Well Information			
WF.01	Equipment Rating Know if the equipment on the well is suitable for a specified well intervention operation.	Given well data and a specific operation determine the suitability of the equipment.	X	X
WF.02	Pressures Know how to calculate down hole pressures.	Given a set of data, calculate the differential at any point between the tubing and annulus above and below any barrier.	X	X
WF.03	Understand the effect of fluid density on 'annulus pressure limitation'.	Calculate the effect on the 'annulus pressure limitation' of a change in the density of the well fluid in the annulus	X	X
WF.04	Understand the difference between string and annuli pressures.	Given well data, provide interpretation of the difference between string and annulus pressure, in either: a) Wireline operations. b) Coiled tubing operations. c) Snubbing operations.		X
WF.05	Volumes Know how to calculate the internal and annular volumes from industry standard displacement and capacity tables.	Given a set of data, calculate various down hole volumes.	X	X
WF.06	Integrity Tests Know how to perform integrity tests.	Describe the correct rig-up and procedures for performing : a) Casing integrity tests b) Plug tests c) Sliding Sleeve tests	X	X
WF.07	Know how to analyse integrity tests results.	From given test data demonstrate the capability to analyse test results.	X	X

International Well Control Forum – Well Intervention Pressure Control, Principles & Procedures Syllabus

	Standards	Performance Criteria	Level. 1	Level. 2
WH.01	Pressure Control Methods Know how to select kill pump rates.	Describe the effects of different kill pump rates on well bore pressures and on well-bore conditions, consistent with the formation strength, annulus friction loss, well-bore conditions and fluid-handling capacity of the surface disposal system.	X	X
WH.02	Know how to select the most appropriate kill method.	Given a set of well-bore conditions, explain why you have selected a specific kill method.	X	X
WH.03	Know the advantages and disadvantages of bullheading.	List the advantages and disadvantages of bullheading.	X	X
WH.04	Know how to assess the suitability of the bullheading procedure in a given kill situation and demonstrate its applicability.	a) Given shut-in well conditions together with well and equipment data, explain if the bullheading method should be applied or not. b) Prepare a pumping schedule for bullheading a given well scenario. c) Calculate the necessary pumping rate for bullheading a gas well for a given well configuration with respect to formation damage. d) Calculate the maximum allowable surface pressure with given well data.	X X X X	X X X X
WH.05	Understand the advantages and disadvantages of forward and reverse circulation.	Explain the advantages and disadvantages of forward and reverse circulation.	X	X
WH.06	Know how to prepare a pumping diagram for the circulation procedure.	Prepare a pumping diagram for circulation of a given well.		X
WH.07	Understand and perform the “Bleed and Lubricate” procedure.	a) Describe the “Bleed and Lubricate” procedure. b) Prepare a pressure diagram to “Bleed and Lubricate” a given well. c) Given a simulated well situation, kill the well using the “Bleed and Lubricate” procedure.	X	X

International Well Control Forum – Well Intervention Pressure Control, Principles & Procedures Syllabus

Ref.	Standards	Performance Criteria	Level. 1	Level. 2
	Problems			
WI.01	Free Gas in the Well Understand the effect of hydrostatic head on the perforated interval	Define the mechanisms by which losses can occur in one section of the perforated interval with other areas still producing.	X	X
WI.02	Know the correct action required for maintaining control.	Understand what steps may be required to maintain control during a job (e.g. use of pills, LCM, plugs, etc.).	X	X
WI.03	Understand, from surface indicators, the effects of gas intrusion.	Given gauge readings, estimate the gas intrusion.	X	X
WI.04	Swab and Surge Effects Understand the effect on the perforations of swab and surge pressures.	Relate the overbalance to swab pressure and formation strength to surge pressure.	X	X
WI.05	String Washout Know how to detect the occurrence of string washout or pinhole leaks (CT & Snubbing) and understand the consequences.	Know how to detect a pinhole leak or washout, the steps that must be taken to isolate it and how to get out of the hole again.	X	X
WI.06	Know how to detect the occurrence of string parting, broken coil or loss of BHA.	Know how to detect a broken string, coil or lost BHA and the steps that must be taken to get out of the hole again.	X	X
WI.07	Blockage In the Well Know how to detect a possible blockage anywhere in the well.	Given specific well data, identify a possible blockage in the well.	X	X
WI.08	Understand the possible consequences for a well intervention operation of a blockage in the well.	Given specific well data, determine the most appropriate procedure to deal with a blockage.	X	X
WI.09	Hydrate Formation Understand hydrates, and the conditions likely to lead to their formation.	Define what hydrates are and list conditions likely to lead to their formation.	X	X
WI.10	Know the main methods of preventing hydrate formation.	List the main methods of preventing hydrate formation.	X	X

International Well Control Forum – Well Intervention Pressure Control, Principles & Procedures Syllabus

Ref.	Standards	Performance Criteria	Level. 1	Level. 2
WJ.01	<p>Pressure Control Management</p> <p>Pre-Operation Planning Understand the need for a plan outlining the well control responsibilities of those persons involved in the work to be performed.</p>	<p>Describe the lines of communication and the roles of responsible parties, including the importance of pre-job on site planning meetings and daily toolbox talks.</p>	X	X
	<p>Abnormal Operations Understand the need to organise the persons involved in the work and the steps to be taken afterwards.</p>	<p>a) Describe how equipment and personnel would be organised to recover the situation once the well is safely shut in.</p> <p>b) Analyse the communication requirements with those persons involved with the problem and others who may be affected by it.</p>	X	X
WJ.02			X	X