

Level	Training is on responsibilities for	Action may occur relative to Well Control Assurance <sup>a</sup>	What training this person needs	Learning Outcomes	Certificate for	Repeat Frequency	Learning Method	Formal Assessment	Guide to Typical Roles (Titles can vary between different companies, locations or facilities). The Level may need to be adjusted depending on responsibilities. This list is a guide which is not exhaustive: the principle is that operator and employer review what training is required to manage the risks.				
1	All Personnel contributing to the well project	For individuals who need an awareness of what well control is and those who could perform an action that might indirectly impact Well Control Assurance (WCA)	Awareness of the processes and terminology of well life cycle in order to develop adequate knowledge to provide the required support	Have relevant awareness knowledge of the Key Topics to provide effective support	A general overview of the life cycle of a well with emphasis on how everyone's role can affect well control	None (No repeat)	Online modules or classroom. Include Self-Assessment Quizzes	None	<ol style="list-style-type: none"> <li>The following non well-site office based staff in an oil and gas operating company drilling or well operations department: <ol style="list-style-type: none"> <li>Logistics coordination personnel and logistics supervisors</li> <li>Operations coordination, well planning and well scheduling personnel</li> </ol> </li> <li>Offshore Installation Managers (OIMs) that do not have a primary function for drilling and/or well intervention (i.e. Production OIMs)</li> <li>Roustabouts, deck crew, and platform and site location crane operators</li> <li>Rig move captains or rig move Offshore Installation Managers (OIMs)</li> <li>Oil and gas installation supply and support vessel Watch Officers and Captains</li> <li>Other non-critical well-site personnel responsible for downhole and surface well equipment repair, inspection and operations such as: <ol style="list-style-type: none"> <li>Remotely Operated Vehicle (ROV) personnel (non-supervisory)</li> <li>Other well-site non-supervisory and non-critical drilling or intervention personnel</li> <li>Tubular and rig inspection personnel</li> </ol> </li> </ol>				
2	Operations Team personnel	Well-site based position whose action or inaction that could directly influence (WCA) <sup>aiii</sup>	Skills to act under guidance	Have knowledge and skills to effectively act under guidance (monitor, observe, detect, report)	Attention to Well Control Prevention and Response for the appropriate equipment scenarios (surface / subsea): 1) Drilling 2) Intervention 3) Support Services	Every 5 years	Classroom, online module or on the job mentored programme	Examination	<table border="0"> <tr> <td> <ol style="list-style-type: none"> <li><b>Drilling, Workover and Completions</b> <ol style="list-style-type: none"> <li>Well-site operations engineer</li> <li>Well-site and office based operations geologist</li> <li>Roughneck</li> <li>Derrick-man</li> <li>Drilling Contractor Maintenance personnel (e.g., maintenance supervisor, rig mechanic)</li> <li>BOP Equipment Installation, re-work, repair or maintenance personnel</li> </ol> </li> </ol> </td> <td> <ol style="list-style-type: none"> <li><b>Intervention</b> <ol style="list-style-type: none"> <li>Well-site operations engineer</li> <li>Intervention services crew members</li> <li>Well-site based wireline or slick-line crew members</li> <li>Coiled tubing services crew members</li> <li>Snubbing crew members</li> <li>Well test crew members</li> <li>Pumping and stimulation crew members</li> </ol> </li> </ol> </td> </tr> <tr> <td colspan="2"> <ol style="list-style-type: none"> <li><b>Support Services <sup>b</sup></b> <ol style="list-style-type: none"> <li>BOP / Subsea engineer, dynamic position operator</li> <li>Well-site ROV supervisor and crew</li> <li>Well-site drilling fluids, mud and completion fluids engineer</li> <li>Well-site directional driller</li> <li>Fishing engineer or fishing tool operator</li> <li>Mud logger or well-site drilling data engineer</li> <li>Well-site casing crew supervisors</li> <li>Well-site cementing operator</li> <li>Well head engineer</li> </ol> </li> <li>MPD / UBD well-site service personnel (non-supervisory)</li> <li>Casing running personnel (non-supervisory)</li> <li>Directional surveying / MWD / LWD personnel</li> <li>Production staff / supervisors</li> <li>Crane operators suspending intervention equipment</li> <li>Well head maintenance crew</li> <li>Well-site oilfield equipment repair personnel</li> <li>Electric- supervisor and crew</li> <li>Subsea wellhead / Xmas Tree engineer</li> </ol> </td> </tr> </table>	<ol style="list-style-type: none"> <li><b>Drilling, Workover and Completions</b> <ol style="list-style-type: none"> <li>Well-site operations engineer</li> <li>Well-site and office based operations geologist</li> <li>Roughneck</li> <li>Derrick-man</li> <li>Drilling Contractor Maintenance personnel (e.g., maintenance supervisor, rig mechanic)</li> <li>BOP Equipment Installation, re-work, repair or maintenance personnel</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li><b>Intervention</b> <ol style="list-style-type: none"> <li>Well-site operations engineer</li> <li>Intervention services crew members</li> <li>Well-site based wireline or slick-line crew members</li> <li>Coiled tubing services crew members</li> <li>Snubbing crew members</li> <li>Well test crew members</li> <li>Pumping and stimulation crew members</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li><b>Support Services <sup>b</sup></b> <ol style="list-style-type: none"> <li>BOP / Subsea engineer, dynamic position operator</li> <li>Well-site ROV supervisor and crew</li> <li>Well-site drilling fluids, mud and completion fluids engineer</li> <li>Well-site directional driller</li> <li>Fishing engineer or fishing tool operator</li> <li>Mud logger or well-site drilling data engineer</li> <li>Well-site casing crew supervisors</li> <li>Well-site cementing operator</li> <li>Well head engineer</li> </ol> </li> <li>MPD / UBD well-site service personnel (non-supervisory)</li> <li>Casing running personnel (non-supervisory)</li> <li>Directional surveying / MWD / LWD personnel</li> <li>Production staff / supervisors</li> <li>Crane operators suspending intervention equipment</li> <li>Well head maintenance crew</li> <li>Well-site oilfield equipment repair personnel</li> <li>Electric- supervisor and crew</li> <li>Subsea wellhead / Xmas Tree engineer</li> </ol>	
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3	Equipment Operator	Has to perform an action to ensure WCA <sup>aiii</sup> or to respond to well control incidents WCA <sup>aiii</sup>	Correct actions to take	Be able to perform their role effectively, in particular by identifying anomalies and performing the first actions independently, and recognise that they are empowered to do so. Proactively communicate with all personnel who provide support to maintaining well control (e.g. Level 2 personnel)	Attention to Well Control Prevention and Response for the appropriate equipment scenarios (surface / subsea): 1) Drilling 2) Intervention 3) Support Services	Every 2 years	Classroom and/or seminars <sup>c</sup>	Examination and Practical <sup>d</sup>	<table border="0"> <tr> <td> <ol style="list-style-type: none"> <li><b>Drilling, Workover and Completions</b> <ol style="list-style-type: none"> <li>Driller</li> <li>Assistant driller</li> </ol> </li> </ol> </td> <td> <ol style="list-style-type: none"> <li><b>Intervention</b> <ol style="list-style-type: none"> <li>Wireline, E-line, Slick-line operator</li> <li>N2 operator</li> <li>Wellhead / Tree installation engineer</li> <li>Hydraulic work-over (snubbing) operator</li> <li>Coiled tubing operator and equivalent positions in other well-servicing or intervention operations</li> </ol> </li> </ol> </td> </tr> <tr> <td colspan="2"> <ol style="list-style-type: none"> <li><b>Support Services <sup>b</sup></b> <ol style="list-style-type: none"> <li>Subsea BOP Engineer</li> <li>MPD / UBD well-site service supervisor</li> </ol> </li> <li>Well testing crew</li> <li>LMRP Engineer</li> </ol> </td> </tr> </table>	<ol style="list-style-type: none"> <li><b>Drilling, Workover and Completions</b> <ol style="list-style-type: none"> <li>Driller</li> <li>Assistant driller</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li><b>Intervention</b> <ol style="list-style-type: none"> <li>Wireline, E-line, Slick-line operator</li> <li>N2 operator</li> <li>Wellhead / Tree installation engineer</li> <li>Hydraulic work-over (snubbing) operator</li> <li>Coiled tubing operator and equivalent positions in other well-servicing or intervention operations</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li><b>Support Services <sup>b</sup></b> <ol style="list-style-type: none"> <li>Subsea BOP Engineer</li> <li>MPD / UBD well-site service supervisor</li> </ol> </li> <li>Well testing crew</li> <li>LMRP Engineer</li> </ol>	
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4	Supervisor	Specifies and has oversight that correct actions are carried out	Skills to anticipate, plan, oversee and verify	Be able to establish consistent practices to assure continued primary well control and well integrity. When anomalous situations occur, or conditions escalate, they will be able to analyse the situation, develop plans to minimize the impact and recover the situation to the norm	Attention to Well Control Planning, Prevention and Response for the appropriate equipment scenarios (surface / subsea): 1) Drilling 2) Intervention 3) Support Services	Every 2 years	Classroom and/or seminars <sup>c</sup>	Examination and Practical <sup>d</sup>	<table border="0"> <tr> <td> <ol style="list-style-type: none"> <li><b>Drilling, Workover and Completions</b> <ol style="list-style-type: none"> <li>Drilling, Workover and Completions well-site supervisor, Superintendent or company man (day and night)</li> <li>Tool pusher</li> <li>Drilling contractor rig manager</li> <li>Office based Operational staff (e.g. Senior Well Engineer, Operational Well Engineer)</li> </ol> </li> </ol> </td> <td> <ol style="list-style-type: none"> <li><b>Intervention</b> <ol style="list-style-type: none"> <li>Completion / work-over / intervention supervisor or superintendent</li> <li>Well-site completions / work-over supervisor</li> <li>Supervisors or crew chiefs for special service operations such as wireline, slick-line and coiled tubing operations, that provide specific well control equipment for these activities</li> <li>Office based Operational staff (e.g. Senior Completions / Well Interventions Engineer, Operational Completions / Well Intervention Engineer)</li> </ol> </li> </ol> </td> </tr> <tr> <td colspan="2"> <ol style="list-style-type: none"> <li><b>Support Services <sup>b</sup></b> <ol style="list-style-type: none"> <li>Offshore Installation Manager (OIM) for offshore units with a primary function for drilling or well intervention</li> <li>Well-site personnel supervising Managed Pressure Drilling (MPD) operations or Under-Balance Drilling (UBD) services</li> <li>Hydraulic work-over (snubbing) supervisor</li> </ol> </li> </ol> </td> </tr> </table>	<ol style="list-style-type: none"> <li><b>Drilling, Workover and Completions</b> <ol style="list-style-type: none"> <li>Drilling, Workover and Completions well-site supervisor, Superintendent or company man (day and night)</li> <li>Tool pusher</li> <li>Drilling contractor rig manager</li> <li>Office based Operational staff (e.g. Senior Well Engineer, Operational Well Engineer)</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li><b>Intervention</b> <ol style="list-style-type: none"> <li>Completion / work-over / intervention supervisor or superintendent</li> <li>Well-site completions / work-over supervisor</li> <li>Supervisors or crew chiefs for special service operations such as wireline, slick-line and coiled tubing operations, that provide specific well control equipment for these activities</li> <li>Office based Operational staff (e.g. Senior Completions / Well Interventions Engineer, Operational Completions / Well Intervention Engineer)</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li><b>Support Services <sup>b</sup></b> <ol style="list-style-type: none"> <li>Offshore Installation Manager (OIM) for offshore units with a primary function for drilling or well intervention</li> <li>Well-site personnel supervising Managed Pressure Drilling (MPD) operations or Under-Balance Drilling (UBD) services</li> <li>Hydraulic work-over (snubbing) supervisor</li> </ol> </li> </ol>	
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5	Engineer and Approving Authority <sup>e</sup>	Getting the agreed design correct and developing the normal operating envelope. Identifying actions out-with the agreed design and managing the risk	Skills to design the well and well activities. Skill to identify and to specify actions to be taken when stepping outside of the normal operating envelope	Have discipline-specific knowledge and skills, to be capable of planning and performing safe well design and/or intervention operations. Be able to evaluate technically on deviations to the well operations plan and advise accordingly	One discipline-specific training course for all operations, environments and rig types	None (Continuous learning refreshers recommended) <sup>f</sup>	Classroom and/or seminars <sup>c</sup>	Examination	<table border="0"> <tr> <td> <ol style="list-style-type: none"> <li>Drilling engineer / Senior drilling engineer</li> <li>Completion engineers / Senior completion engineer</li> <li>Petroleum engineers / Senior petroleum engineers</li> <li>Well service engineer / Senior well service engineer</li> <li>Intervention engineer / Senior intervention engineer</li> <li>Drilling / Intervention superintendent (if involved with well design)</li> </ol> </td> <td> <ol style="list-style-type: none"> <li>Drilling manager (up to first line drilling management)</li> <li>Drilling project managers (up to first line drilling management)</li> <li>Well operations managers</li> <li>Well services managers</li> <li>Office based design personnel</li> <li>Senior wells personnel, e.g. Team Leader and General Manager Wells</li> </ol> </td> </tr> </table>	<ol style="list-style-type: none"> <li>Drilling engineer / Senior drilling engineer</li> <li>Completion engineers / Senior completion engineer</li> <li>Petroleum engineers / Senior petroleum engineers</li> <li>Well service engineer / Senior well service engineer</li> <li>Intervention engineer / Senior intervention engineer</li> <li>Drilling / Intervention superintendent (if involved with well design)</li> </ol>	<ol style="list-style-type: none"> <li>Drilling manager (up to first line drilling management)</li> <li>Drilling project managers (up to first line drilling management)</li> <li>Well operations managers</li> <li>Well services managers</li> <li>Office based design personnel</li> <li>Senior wells personnel, e.g. Team Leader and General Manager Wells</li> </ol>		
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Chart excludes Well Integrity Assurance (WIA) during production use of the well.

<sup>a</sup> Well Control Assurance. WCA (i): The assurance that primary well control is maintained. WCA (ii): When this is not the case that the situation is properly contained and the status of the well returned safely to normality.

<sup>b</sup> Well Support Service providers (or their training partners) are to identify and deliver appropriate well control training to their staff requisite for services provided.

<sup>c</sup> Could be a fully auditable alternative. The Classroom is a Standard. The full capability should be demonstrated to meet or exceed the learning environment of the classroom.

<sup>d</sup> For Drilling (and for D/WO/C): Written examination and simulator assessment. For Well Intervention: Written examination and simulator assessment or approved alternative (e.g. scenario-based paper exercise).

<sup>e</sup> Approving Authority is the individual providing technical oversight for the design and for deviations.

<sup>f</sup> Refreshers recommended because technologies, practices, designs, standards, etc. change with time.