

Advanced Well Integrity Management

Sculpt Your Skills & Knowledge of Advanced Well Integrity Management from The Expert!

Course Level : Intermediate

22nd - 26th June 2026 at Kuala Lumpur, Malaysia | 05th - 09th October 2026 at Bangkok, Thailand
09th - 13th November 2026 at Kuala Lumpur, Malaysia

A lot of
Practical Things,
Case Studies
and Exercises!



Petrosync Distinguished Instructor

Mike Etuhoko, P.Eng., PMP, M.Sc., MBA, CCB.D

- ▶ Founder & CEO of Protekz Inc., Calgary, Canada
- ▶ Member, Business & Leadership Committee, The Society of Petroleum Engineers (SPE) Board of Directors

- ▶ Over 30 years of engineering, operations, and management experience in Completion, Workover & Well Services, and Drilling
- ▶ Highly sought after Consultant, President & Founder of Protekz Inc Canada, an independent well and production engineering consultancy
- ▶ Leads major completion and workover projects with companies such as Shell Canada, KNOC, KPO etc in North America, Europe, Africa, Central Asia, & Far East Asia
- ▶ Authored and presented SPE Papers at the SPE Asia Pacific Oil & Gas Conference (Australia, 2004) & SPE Annual Technical Conference & Exhibition (Texas USA)

Key Topics

- ▶ Why well integrity?
- ▶ Well construction/configuration
- ▶ Downhole and surface equipment
- ▶ Wellhead & Xmas tree selection
- ▶ Hydrates
- ▶ Well integrity challenges
- ▶ Annular Fluid Expansion calculations
- ▶ Annular Pressure management
- ▶ MAASP calculations
- ▶ How to mitigate Well Integrity Challenges
- ▶ Wellhead & Xmas tree Valves Maintenance
- ▶ Subsurface Safety Valve & Criticalities
- ▶ Well integrity diagnostic & monitoring tools
- ▶ Flow Assurance issues
- ▶ Understanding ISO 16530
- ▶ Understanding API RP 90
- ▶ Well Integrity Risk Assessment
- ▶ Bow-Tie construction
- ▶ WIMS at Well operational phase

PROGRAM SCHEDULE

08:00	Registration (Day1)
08:10 – 10:00	Session I
10:00 – 10:15	1 st Tea Break
10:15 – 12:00	Session II
12:00 – 13:00	Lunch Break
13:00 – 14:45	Session III
14:45 – 15:00	2 nd Tea Break
15:00 – 16:00	Session IV
16:00	End of Day

*Schedule may vary for each training

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Course Overview

This 5-day master class seminar is designed to deepen your knowledge of well integrity management.

The skills and knowledge gain from this workshop will help organizations:

- ▶ To optimize productivity at the lowest Unit Operating Cost
- ▶ To maintain production sustainability, by avoiding any operational issue related to Well Integrity
- ▶ To facilitate excellent well integrity practices to mitigate potential well integrity related production downtime, incidents, and fatalities
- ▶ To maintain mechanical integrity throughout the well life cycle

The course possesses the following futures:

- ▶ It is the first of its kind in the industry
- ▶ It is loaded with practical examples, case studies, and industrial applications are taken from:
 - different well conditions: High-Pressure High-Temperature, sour gas, and sweet gas, etc.
 - different operating environment (land, swamp, and offshore including deep-water)
 - tropical and arctic (temperate) climates
- ▶ It provides practical exercises, and delegates will be followed up to ensure they can handle all the calculations, without difficulties.
- ▶ Team learning. A group well integrity management project accomplishes the course. All the elements of the course will help you and your team to handle the project challenge.
- ▶ Towards the end of the course, the groups formed in the class, will present their well integrity management project for discussions/reviews.
- ▶ Delegates are allowed to come with their projects of interest, which they could substitute for the class field project design work, but must be presented for discussions/reviews.

Course Objectives

The advantages of attending the well integrity workshop includes:

- ▶ Knowledge and confidence building in well integrity management
- ▶ Preventing or solving the problems that impact well integrity and cost reduction
- ▶ Common well integrity understanding across multi-discipline professionals
- ▶ Socialization of the WIMS documents including WIMS flowchart, risk assessments, etc.
- ▶ Understand the Well Integrity international standards
- ▶ Understand the Well Integrity Management system and its full implementation
- ▶ Well barriers and their verification
- ▶ Monitoring and surveillance of well integrity
- ▶ Investigate and manage well integrity issues, causes & potential solutions
- ▶ Understand repairs to address "Loss of Well Operating Envelope"
- ▶ Maintenance of production sustainability, by avoiding any operational issue related to Well Integrity
- ▶ Mitigation of potential well integrity related production downtime and/or incidents and fatalities.
- ▶ Extending the well and well components longevity
- ▶ Understand safety workover, Well Suspension & Well Abandonment
- ▶ Define well integrity well categorization based on compliance to the barrier policy outlined in the regulations and develop an approach to risk management

Who Should Attend?

- | | | |
|---|---|--|
| ▶ Asset Managers | ▶ Area Production Supervisors/ Wellhead Platform Superintendent | ▶ Production Maintenance Team Leaders & Managers |
| ▶ Well Integrity Engineers | ▶ Field Technicians | ▶ Project Engineers |
| ▶ Completion Engineers | ▶ HSE personnel | ▶ Engineering Team Leaders & Senior Managers |
| ▶ Drilling Engineers | ▶ Field Team Leaders & Managers | ▶ Cross-Discipline Training |
| ▶ Drilling Team Leaders & Managers | ▶ Petroleum Engineers & Managers | ▶ Oil and Gas Project Evaluator |
| ▶ Production Engineers, Team Leaders & Managers | ▶ Reservoir Engineer & Managers | |
| ▶ OIM | ▶ Production Maintenance Engineers | |

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Course Agenda

Day 1

- ▶ Introduction
Introduction of individual, department / professional background, years of experience and individual expectation from the course
- ▶ Pre-course quiz & review
- ▶ Why well integrity?
 - ▶ Upstream Asset Integrity
 - ▶ Definition of well integrity
 - ▶ Well Integrity life cycle
 - ▶ Examples of incidents / fatalities where well integrity was compromised
 - ▶ Importance of well integrity
- ▶ Well construction/configuration:
 - ▶ Video about Well Construction
- ▶ Downhole and surface equipment:
 - ▶ Tubing size selection (inflow/outflow, liquid loading and erosional velocity)
 - ▶ Material selection / metallurgy
 - ▶ Exercise 1: Objective of this exercise: to learn metallurgy selection for production tubing and completion equipment
- ▶ Wellhead & Xmas tree selection
 - ▶ Exercise 2: Objective of this exercise: to learn metallurgy selection for wellhead and Christmas tree.
- ▶ Hydrates:
 - ▶ Impact on well integrity and productivity
 - ▶ Hydrate prediction and prevention
 - ▶ Exercise 3: Hydrate Prediction / Review: The purpose of the exercise is to learn how to predict hydrate formation temperature
- ▶ Introduction to Well Integrity Management project

Day 2

- ▶ Well integrity challenges
- ▶ Annular Fluid Expansion calculations
- ▶ Annular Pressure management
- ▶ MAASP calculations
- ▶ Exercise 4: The Objective of this exercise are as follows:
 - ▶ To learn how to calculate Annulus Fluid Expansion (AFE)
 - ▶ To learn how to calculate MAASP on different annuli
 - ▶ To appreciate the necessity to set MAWOP and trigger alarm for Well Integrity Management

- ▶ Exercise 5: The Objective of this exercise are as follows:
 - ▶ To learn how to calculate Casing shoe strength and MAASP on different annuli
 - ▶ To appreciate the necessity to set MAWOP and trigger alarm for well integrity
- ▶ Case Studies on Annular Pressure management
- ▶ How to mitigate HPHT / Near HPHT Well Integrity Challenges
- ▶ Exercise 6: The Objective of this exercise is to learn how MAASP can change over the life time of the well
- ▶ Wellhead & Xmas tree Valves Maintenance:
 - ▶ Gate valves and grease type
 - ▶ Actuator
 - ▶ Christmas tree valves test procedure, etc.
- ▶ Exercise 7: The Objective of this exercise are as follows:
 - ▶ To learn how to calculate Actuator Control Pressure in various conditions
 - ▶ To learn the importance of control pressure to the actuator's operations
- ▶ Well Integrity Management project

Day 3

- ▶ Subsurface Safety Valve & Criticalities:
 - ▶ Regulatory requirements
 - ▶ SCSSV criticalities
 - ▶ SCSSV operating pressure curve
 - ▶ Recommended hold open pressure
 - ▶ Hydraulic oil specifications
 - ▶ Special notes on SCSSV operations
 - ▶ Inflow test procedure for SCSSV.
 - ▶ Videos on safety valve working principle
- ▶ Exercise 8: The Objective of this exercise are as follows:
 - ▶ To learn how to equalize pressure across Sub-surface safety valve
 - ▶ To learn how to calculate hold open pressure for Sub-surface safety valve
 - ▶ To learn how to perform safety valve inflow test calculations in accordance to API RP 14B
- ▶ Well integrity diagnostic & monitoring tools: corrosion logs, noise logs, PLT logs, RST logs, WFL logs, CBL logs, etc.
- ▶ Case studies on the use of well integrity diagnostic & monitoring tools
- ▶ Flow Assurance issues: corrosion, wax/ paraffin, scales, water /gas coning, etc.
- ▶ Well Integrity Management project

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Day 4

- ▶ Well integrity challenges
- ▶ Annular Fluid Expansion calculations
- ▶ Annular Pressure management
- ▶ MAASP calculations
- ▶ Exercise 4: The Objective of this exercise are as follows:
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- ▶ Well Integrity Management project

- ▶ Organizational structure and tasks
- ▶ Well barriers
 - ▶ Performance standards
 - ▶ Leak rates
- ▶ Well monitoring and surveillance
 - ▶ Monitoring and surveillance frequency
 - ▶ Well operating limits
 - ▶ Suspended and shut-in wells
 - ▶ Visual inspection
 - ▶ Well logging
 - ▶ Corrosion monitoring
 - ▶ Corrosion monitoring and prevention – external
 - ▶ Erosion monitoring
 - ▶ Structural integrity monitoring
 - ▶ Well elevation monitoring
 - ▶ Reservoir subsidence
- ▶ Annulus pressure management
 - ▶ Management considerations
 - ▶ Sources of annulus pressure
 - ▶ Annulus pressure monitoring and testing
 - ▶ Frequency of monitoring tubing and annulus casing pressures
 - ▶ Investigation of annulus pressure
 - ▶ Maximum allowable annulus surface pressure
 - ▶ Maintaining annulus pressure within the thresholds
 - ▶ Review and change of MAASP and thresholds
- ▶ Well maintenance
 - ▶ Replacement parts
 - ▶ Frequency of maintenance
 - ▶ Component testing methods
 - ▶ ESD related safety systems
- ▶ Risk assessment of well integrity failure and its management
 - ▶ Integrity failure ranking and prioritization
 - ▶ Well failure model
- ▶ Reporting and documentation
- ▶ Periodic well review
- ▶ Well Integrity management project presentations

Day 5

- ▶ WIMS at Well operational phase
- ▶ Well operational phase objectives

HYBRID TRAINING SOLUTIONS

FOCUS TRAINING • REDUCE COST • ENHANCED RESULTS

Over the years, there has been a growing demand for hybrid training programs. It is an excellent option to maximize your training dollar for your specific training needs. We make it possible to run a training program that is customized totally to your training needs at a fraction of an in-house budget!

If you like to know more about this excellent program, please contact us on +65 3159 0800 or email general@petrosync.com

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SAVE COST • IMPROVE PERFORMANCE • REDUCE RISK

PetroSync understands that in current economic climate, getting an excellent return on your training investment is critical for all our clients. This excellent training can be conducted exclusively for your organization. The training can be tailored to meet your specific needs at your preferred location and time. We will meet you anywhere around the globe.

If you like to know more about this excellent program, please contact us on +65 3159 0800 or email general@petrosync.com

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Instructor Profile



Petrosync Distinguished Instructor Mike Etuhoko, P.Eng., PMP, M.Sc., MBA, CCB.D

- Founder & CEO of Protekz Inc., Calgary, Canada
- Member, Business & Leadership Committee, The Society of Petroleum Engineers (SPE) Board of Directors

Mike Etuhoko is the founder and CEO of Protekz Inc., a training, consultancy, and advisory company based in Calgary, Canada. He has a proven track record of driving transformative strategies that consistently enhance profitability while promoting sustainable practices in the energy sector. With over three decades of oil and gas experience, he has delivered exceptional results, generating a cumulative profit exceeding \$2.7 billion across diverse international ventures. He was the Head of Completion and Well Integrity at Husky-CNOOC Madura Limited (HCML) in Jakarta, Indonesia. He led the design and delivery of the BD complex well completion, characterized by high pressure, high temperature (HPHT), and sour gas, the first of its kind in Indonesia.

Mike has handled challenging drilling and workover, well completion, sand control, well interventions, formation damage prevention and treatments, and well integrity management projects for oil and gas major brands such as TotalEnergies, Shell, Karachaganak Petroleum Operating (KPO), Korean National Oil Company and HCML. In 2012, following his exceptional contributions to the KPO project in Kazakhstan, Mike received the Chief Executive Innovation Award for "Open Hole Multistage Fracturing Completion with Swelling Packers and Sliding Sleeves in Carbonate Reservoir."

Mike is a Professional Engineer registered in Alberta, Canada, a certified Project Management Professional, and a certified Shell Round 2 holder specializing in completion and well intervention.

Mike holds a B.Sc. in Mechanical Engineering and an M.Sc. in Petroleum Engineering and Project Management from the Institute Francais du Petrole (IFP school) in France. In addition, he recently earned an MBA from Warwick Business School and a distinctive Sloan M.Sc. from London Business School, which is exclusively designed for senior executives with substantial leadership experience. Complementing these qualifications, he has engaged in diverse executive leadership and financial education programs at Harvard and Said Business School and several sustainability certifications showcasing his commitment to continuous learning and growth amidst the global poly-crisis and energy transition.

Therefore, Mike brings an international perspective to technical leadership and is adept at navigating complex oil and gas project development challenges. He fosters sustainable and responsible oil and gas field development and production amid energy transition with diverse cultural contexts.

Mike is multilingual and fluent in English, French and Indonesian. He has successfully led global teams and managed operations in various regions covering five continents.

Mike is a lifelong member of the Society of Petroleum Engineers (SPE). Between 2006 and 2007, he served as the Secretary of the Congo SPE section and is currently on the Business and Leadership committee of the SPE International Board of Directors.

Partial Client List

- | | |
|------------------------------|----------------------------|
| ► Husky-CNOOC Madura Limited | ► BP Indonesia |
| ► ERCB | ► Petronas Malaysia |
| ► PennWest Exploration | ► SKKMigas Indonesia |
| ► NAL Resources | ► Nippon Japan |
| ► Apache Corp | ► Total Energies Indonesia |
| ► Nexen Inc. | ► Statoil Canada |
| ► Bircliff Energy Ltd. | ► Cairn India |
| ► Suncor Energy | ► and many more. |

INVESTMENT PACKAGES

Please checklist the package that you are attending!

	Advanced Well Integrity Management SCHEDULES	LOCATION	PRICE
<input type="checkbox"/>	22 nd - 26 th June 2026	Kuala Lumpur, Malaysia	USD 4,350
<input type="checkbox"/>	05 th - 09 th October 2026	Bangkok, Thailand	USD 4,350
<input type="checkbox"/>	09 th - 13 th November 2026	Kuala Lumpur, Malaysia	USD 4,350

* All prices are subject to change without notice and are not guaranteed, except that prices for an order that have been accepted by PetroSync is not subject to change after acceptance

* Price is nett excluding Withholding Tax if any and will be quoted separately. Please send us the withholding tax payment receipt.

DELEGATE DETAILS

1st Delegate Name _____ Mr ☐ Mrs ☐ Ms ☐ Dr ☐ Others ☐

Direct Line Number: _____ Email: _____

Mobile Number: _____ Job Title: _____

Department: _____ Head of Department: _____

2nd Delegate Name _____ Mr ☐ Mrs ☐ Ms ☐ Dr ☐ Others ☐

Direct Line Number: _____ Email: _____

Mobile Number: _____ Job Title: _____

Department: _____ Head of Department: _____

3rd Delegate Name _____ Mr ☐ Mrs ☐ Ms ☐ Dr ☐ Others ☐

Direct Line Number: _____ Email: _____

Mobile Number: _____ Job Title: _____

Department: _____ Head of Department: _____

4th Delegate Name _____ Mr ☐ Mrs ☐ Ms ☐ Dr ☐ Others ☐

Direct Line Number: _____ Email: _____

Mobile Number: _____ Job Title: _____

Department: _____ Head of Department: _____

*Please fill all the details including mobile number. This help us to contact participant if they are late in class or if there is any urgent update (through whatsapp/call)

INVOICE DETAILS

Attention Invoice to: _____

Direct Line Number: _____ Fax: _____

Company: _____ Industry: _____

Address: _____ Postcode: _____

Country: _____ Email: _____

Please note:

- Indicate if you have already registered by Phone ☐ Fax ☐ Email ☐ Web ☐

- If you have not received an acknowledgement before the training, please call us to confirm your booking.

PAYMENT METHODS

☐ By Credit Card

☐ By Direct Transfer : Please quote invoice number(s) on remittance advice

PetroSync Global Pte Ltd Bank details:

Account Name : PetroSync Global Pte Ltd

Bank Name : DBS Bank Ltd

Bank Code : 7171 • Bank Swift Code : DBSSSGSGXXX • Branch code : 288

Account No : 0288-002682-01-6-022 (USD)

Bank Address : 12 Marina Boulevard, Level 3. Marina Bay Financial Centre Tower 3. Singapore 018982

All bank charges to be borne by payer. Please ensure that PetroSync Global Pte Ltd receives the full invoiced amount.

COURSE CONFIRMATION

I agree to PetroSync's payment terms and cancellation policy.

Signature : _____

Date : _____

PAYMENT TERMS : Payment is due in full at the time of registration. Full payment is mandatory for event attendance.

PROGRAMME CONSULTANT

Name : Cay Aagen

Email : registration@petrosync.com

Phone : +65 3159 0800

TERMS AND CONDITIONS

DISCLAIMER

Please note that trainers and topics were confirmed at the time of publishing; however, PetroSync may necessitate substitutions, alterations or cancellations of the trainers or topics or location (classroom / Virtual). As such, PetroSync reserves the right to change or cancel any part of its published programme due to unforeseen circumstances. Any substitutions or alterations will be updated on our web page as soon as possible.

DATA PROTECTION

The information you provide will be safeguarded by PetroSync that may be used to keep you informed of relevant products and services. As an international group we may transfer your data on a global basis for the purpose indicated above. If you do not want us to share your information with other reputable companies, please tick this box ☐

CANCELLATION POLICY

Delegates who cancel after the training is officially confirmed run by email, are liable to pay the full course fee and no refunds will be granted. You may substitute delegates at any time as long as reasonable advance notice is given to PetroSync.

In the event that PetroSync cancels or postpones or change the trainer or change the training location (classroom / virtual) of an event for any reason and that the delegate is unable or unwilling to attend in on the rescheduled date, you will receive a credit voucher for 100% of the contract fee paid. You may use this credit voucher for another PetroSync to be mutually agreed with PetroSync, which must occur within a year from the date of postponement.

PetroSync is not responsible for any loss or damage as a result of the cancellation policy. PetroSync will assume no liability whatsoever in the event this event is cancelled, rescheduled or postponed due to any Act of God, fire, act of government or state, war, civil commotion, insurrection, embargo, industrial action, or any other reason beyond management control.

CERTIFICATE OF ATTENDANCE

80% attendance is required for PetroSync's Certificate of Attendance.

DETAILS

Please accept our apologies for mail or email that is incorrectly addressed.

Please email us at registration@petrosync.com and inform us of any incorrect details. We will amend them accordingly.

Find us on Social Media:

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CHARGES & FEE(s)

- For Payment by Direct Telegraphic Transfer, client has to bear both local and oversea bank charges.

- For credit card payment, there is additional 4% credit card processing fee.