

International Association of Drilling Contractors

Mark Denkowski, EVP, Operational Integrity
Elizabeth (Liz) Craddock, Vice President, PGRA
Bob Warren, Vice President, Onshore Operations



IADC History

75 Years: 1940-2015



ODC Logo, 1940-1959
American Association of
Oilwell Drilling Contractors



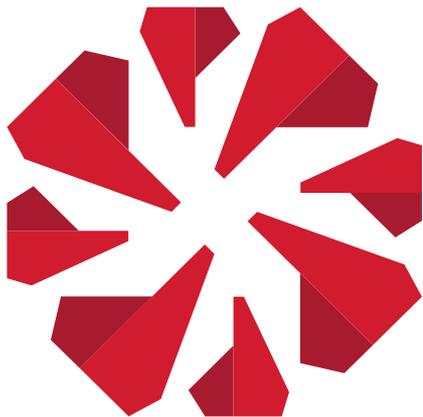
AAODC Logo, 1959-1972
American Association of
Oilwell Drilling Contractors



IADC Logo, 1972-2014
International Association
of Drilling Contractors



IADC Logo, 2014-Present
International Association
of Drilling Contractors



IADC™

IADC 75th Anniversary Logo, 2015
International Association of Drilling Contractors





Founded as the American Association of Oilwell Drilling Contractors in 1940 by a small group of Drilling Contractors meeting in Chicago, Illinois.

The period from 1940 to 1972 was characterized by independent-minded businessmen focused on advancing the art and science of drilling.

- In 1972, the AAODC became the International Association of Drilling Contractors.**
- In 2014 the logo was changed.**
- Today, IADC represents drilling contractors, oil and gas producing companies and manufacturing and service companies worldwide and is truly a multinational organization.**

Nothing is more important than
ensuring the safety of our people.

.....Closely followed by our
commitment to environmental
stewardship

IADC Mission

Catalyzing improved performance for the drilling industry

IADC Vision

For the drilling industry to be recognized for its vital role in the global economy and its high standards of safety, environmental stewardship and operational efficiency.

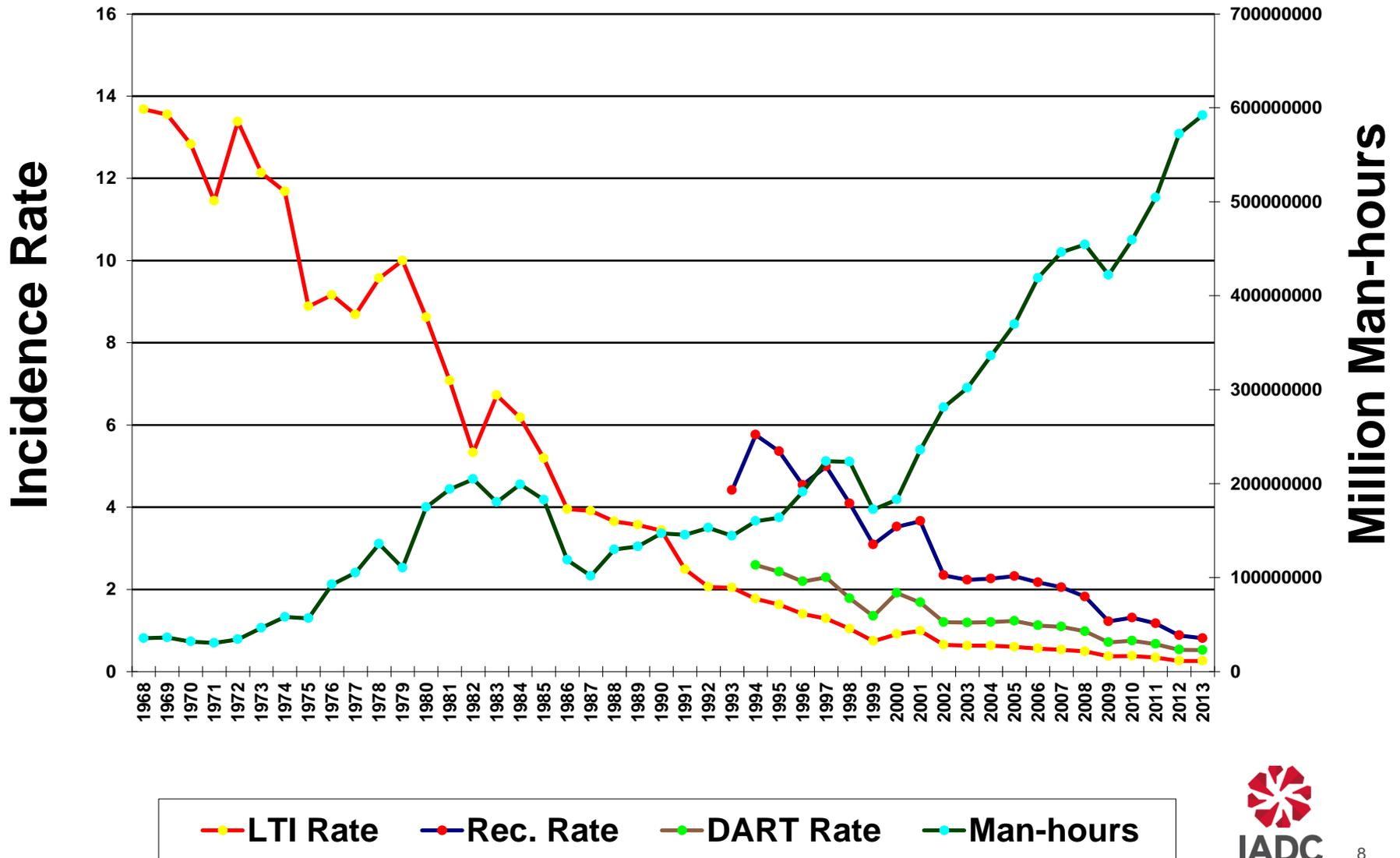
Advocacy: Domestic and Global

WV Commission on Oil and Natural Gas

European Commission
European Union Offshore Authority
Danish Energy Agency
US Coast Guard API
International Regulators Forum
NIOSH OGP NOIA
BSEE European Operations Forum
IMO
OSHA
Texas Railroad Commission



Industry LTI Rates: 1968-2013



Competence In The Work Place

Knowledge, Skills and Abilities (KSA) Project

Raising the Bar on Competency

Develop enhanced competency guidelines for virtually all rig-based positions

- Globally accepted recommended common competence standard
- Industry developed and accepted guidelines
- Addresses looming talent crisis
- Crucial step in developing workforce capabilities



Gateway New Hire Training

Providing Pre-Qualified, Pre-Trained Candidates

Collaborative effort among IADC, colleges, and industry to:

- Attract and screen candidates
- Expedite building of qualified labor pool of potential new employees
- Deliver career development pathways and career guidance



WellSharp – Well Control Training and Assessment

Industry Effort:

By the industry, for the industry

WellCAP
Advisory Panel

Well Control
Committee

Industry
Workgroups



IADC's WellSharp™ program:

A complete root and branch rebuild of well control training

Features of the New Standard

- Electronic knowledge testing system
 - Online testing
 - Offline e-testing
 - Centralized and controlled question database
 - Questions randomized and answers shuffled
 - Pass/fail safety-critical questions
 - Surveys
 - Metrics

Features of the New Standard

- **Independently** proctored assessments
 - Lloyds Register
- Strengthened Instructor qualification requirements
 - Knowledge test
- Focus on training for all personnel involved with Well Control and ensuring that that training is commensurate with their role and responsibilities.
- Continuous training to reduce skill fade.

WellSharp Test Database

IADC Access



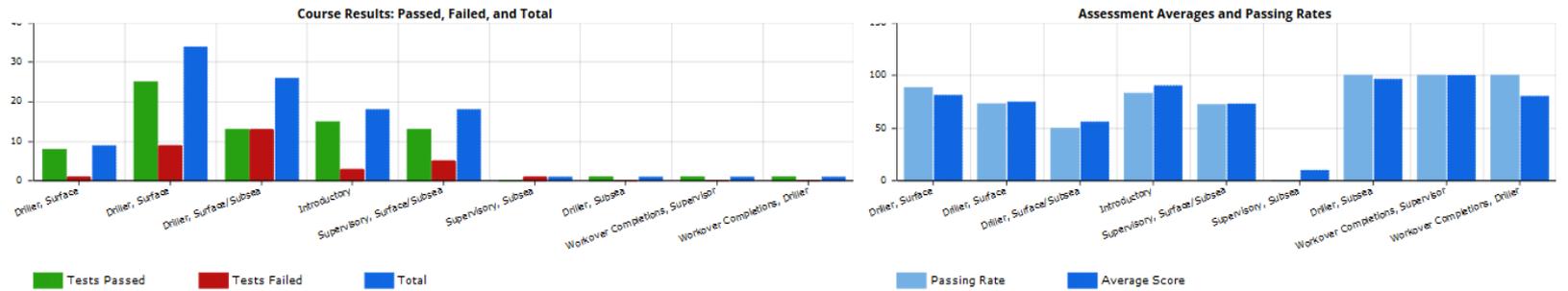
Mark Denkowski [Sign Out](#)

- Home
- My Profile
- Analytics**
- Class Calendar
- Browse Classes
- Certificate Lookup
- Training Providers
- Instructors
- Test Proctors

← Collapse

- Assessments**
- Questions
- Curriculum
- Classes

Assessment Comparison



Assessment	Trainees Assessed	# Passed	# Failed	Passing Rate	Average Score
Drilling Operations, Driller, Surface	9	8	1	88.9%	81%
Drilling Operations, Driller, Surface	34	25	9	73.5%	75%
Drilling Operations, Driller, Surface/Subsea	26	13	13	50%	56%
Drilling Operations, Introductory	18	15	3	83.3%	90%
Drilling Operations, Supervisory, Surface/Subsea	18	13	5	72.2%	73%
Drilling Operations, Supervisory, Subsea	1	0	1	0%	10%
Drilling Operations, Driller, Subsea	1	1	0	100%	97%
Drilling Operations, Workover Completions, Supervisor	1	1	0	100%	100%
Drilling Operations, Workover Completions, Driller	1	1	0	100%	80%



WellSharp Test Database

IADC Access



Mark Denkowski [Sign Out](#)

- [Home](#)
- [My Profile](#)
- [Analytics](#)
- [Class Calendar](#)
- [Browse Classes](#)
- [Certificate Lookup](#)
- [Training Providers](#)
- [Instructors](#)
- [Test Proctors](#)
- [Collapse](#)

Assessments
Questions
Curriculum
Classes

Search Options

Assessment:

Question Bucket:

Competency Category:

Blooms Level:

Difficulty Percentile: Between 0% and 100%

Curriculum:

Module:

Submodule:

[Question Listing](#)
[Question Metrics](#)

Show entries

Search:

Question	Correct Answer	Times Asked	% Correct	Most Answered
Which of the following would not increase the risk of surging the well while running casing?	Lower Casing grade	8	100%	Lower Casing grade (100%)
55 bbls of mud was lost while drilling the last stand down. You suspect ballooning and have been bleeding back mud from the formation in 10 to 15 bbl increments and circulating through the choke. There has been no evidence of any formation fluids being bled back into the well. It is decided to open the well and bleed the last 10 bbls back then circulate. What is the danger of this practice?	As you bleed more mud back there may be some formation fluid bled back into the well	7	43%	As you bleed more mud back there may be some formation fluid bled back into the well(43%)
A 5 bbl gas bubble at 800 psi is allowed to expand to 8 bbls. What is the gas bubble pressure at 8 bbls?	500 psi	3	100%	500 psi(100%)
A 500-foot long cement plug is set up inside the casing shoe. The mud in the hole is to be displaced to a new mud weight. Formation pressure below the cement plug = 11.8 ppg equivalent mud weight New mud weight = 12.8 ppg Top of cement plug = 8200feet If the plug failed and allowed pressure to pass between the top and the bottom of the plug, what would happen to the bottom hole pressure?	BHP would increase	3	67%	BHP would increase(67%)
A 500-foot long cement plug is set up inside the casing shoe. The mud in the hole is to be displaced to brine. Formation pressure below the cement plug = 10.7 ppg equivalent mud weight Brine weight = 9.5 ppg Top of cement plug = 8200 feet If the plug failed and allowed pressure to pass between the top and the bottom of the plug, what would happen to the bottom hole pressure?	BHP would decrease	8	25%	BHP would increase(38%)
A 500-foot long cement plug is set up inside the casing shoe. The mud in the hole is to be displaced to seawater. Formation pressure below the cement plug = 11.8 ppg equivalent mud weight Sea Water = 8.6 ppg Top of cement plug = 8200feet What is the pressure differential across the cement plug?	1671 psi	6	33%	1447 psi(67%)
A 500-foot long cement plug is set up inside the casing shoe. The mud in the hole is to be displaced to seawater. What will be the reduction in hydrostatic pressure on top of the cement plug? Old mud weight = 12.2 ppg Sea Water = 8.6 ppg Top of cement plug = 8200feet	1535 psi	8	88%	1535 psi(88%)



WellSharp Test Database

IADC Access

WellSharp <https://iadc.wellsharp.org/iadcAnalyticsProvider> Search

IADC WELLSHARP Mark Denkowski [Sign Out](#)

Assessments **Questions**

Home
My Profile
Analytics
Class Calendar
Browse Classes
Certificate Lookup
Training Providers
Instructors
Test Proctors

Show 10 entries

Which of the following would not increase the risk of surging?

55 bbls of mud was lost while drilling the last stand down formation fluids being bled back into the well. It is decided to bleed back 10 bbls of mud.

A 5 bbl gas bubble at 800 psi is allowed to expand to 8 bbl.

A 500-foot long cement plug is set up inside the casing shoe. New mud weight = 12.8 ppg
 Top of cement plug = 8200feet

If the plug failed and allowed pressure to pass between the casing and the formation, what would be the pressure differential across the cement plug?

A 500-foot long cement plug is set up inside the casing shoe. Brine weight = 9.5 ppg
 Top of cement plug = 8200 feet

If the plug failed and allowed pressure to pass between the casing and the formation, what would be the pressure differential across the cement plug?

A 500-foot long cement plug is set up inside the casing shoe. Sea Water = 8.6 ppg
 Top of cement plug = 8200feet

What is the pressure differential across the cement plug?

A 500-foot long cement plug is set up inside the casing shoe. Old mud weight = 12.2 ppg
 Sea Water = 8.6 ppg
 Top of cement plug = 8200feet

Question: A 500-foot long cement plug is set up inside the casing shoe. The mud in the hole is to be displaced to seawater. Formation pressure below the cement plug = 11.8 ppg equivalent mud weight
 Sea Water = 8.6 ppg
 Top of cement plug = 8200feet
 What is the pressure differential across the cement plug?

Statistics:
 Times Asked: 6
 Times Correct: 2(33.3%)
 AIM Level: Mastery
 Blooms Level: Analysis
 Module: 2.1 Well Control Concepts
 Submodule: Well Control Terminology and Formation Characteristics
 Learning: Identify common oilfield sedimentary rocks and describe potential flow characteristics (for example, sandstone, carbonates, shale/claystone, and salt; porosity, permeability, formation strength).
 Objective:

Legend:
● Correct
● Incorrect

Options and Results:

Option	Percentage	Count
0% 1364 psi	0%	0
33.3% 1671 psi	33.3%	2
66.7% 1447 psi	66.7%	4
0% 1407 psi	0%	0

Pie Chart Data:

Option	Percentage
1671 psi	33%
1447 psi	67%

Legend for Pie Chart:
● 1671 psi
● 1447 psi
● 1364 psi
● 1407 psi

Table of Correct Answers:

Correct Answer	Times Asked	% Correct	Most Answered
Lower Casing grade	8	100%	Lower Casing grade (100%)
As you bleed more mud back there may be some formation fluid bled back into the well	7	43%	As you bleed more mud back there may be some formation fluid bled back into the well(43%)
500 psi	3	100%	500 psi(100%)
BHP would increase	3	67%	BHP would increase(67%)
BHP would decrease	8	25%	BHP would increase(38%)
1671 psi	6	33%	1447 psi(67%)
1535 psi	8	88%	1535 psi(88%)

Note the increase in Drill



Questions