



AFES Cased Hole Logging Workshop
Keynote Talk

Mike Webster 20th April 2016

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A personal perspective from over 33 years working mature fields and living through numerous price cycles.

The main questions:

What decisions need to be made ?

What information do we need to make those decisions ?

How do we get that information ?

When do we get the information ?

How do we take the action ?



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What decisions need to be made ?

Well integrity ?

Leaks in tubulars

Flow behind pipe

Flow Assurance ?

Rate allocation

Unwanted Fluids

Rate Enhancement

Reservoir Management ?

Unswep intervals

Displacement efficiency

Well Abandonment ?

Pipe recovery

Isolation of porous and permeable zones



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What information do we need to make those decisions ?

There is no single silver bullet !

Multiple sensors using different physics

Maximise the opportunity (multi task)

What other data is available on the field ?

Production trend in the target well

Performance of offset wells

Prior interventions in the well



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How do we get the information ?

What choices do I have !

Permanent continuous real time

Permanent periodic

Intervention based

Coil

Wireline

Carbon rods

Slickline

Surface readout or Memory

What are the constraints

Time

Bed space

Cost



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When do we get the information ?

Proactive Planning !

Observe trends

Predictive models

Optimise data program

Baseline comparisons

Reactive Panic !

Wait until it's broken

Take the production hit

Pay a premium for the data

Poorer quality data



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When do I take the action ?

Do we have the ability to act in the same intervention !

Is the information good enough (go-nogo)

Scenario planning

Flexibility

Do I need time to work the data !

What is the use by date ?

What additional data is needed ?

Who are the decision makers ?



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Where are we heading ?

Technology/ Hardware is still progressing

Investments made at \$100/bbl still working through the system

We have more choice and flexibility

Better sensors

The soft side

New wells are costly but production has to continue

No single provider has the complete solution

Co-operation and collaboration

Relentless cost focus



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Messages

Technical Progression Will Deliver

Hardware and processing improvements will deliver greater efficiency

Increasing range and variety of sensors

Increased choice and flexibility of deployment

We have to be able to

Combine services more efficiently

Reduce surveillance overheads

Integrate the data quickly

Take action to deliver the value



Cased Hole Logging Workshop “Today's Talks”

