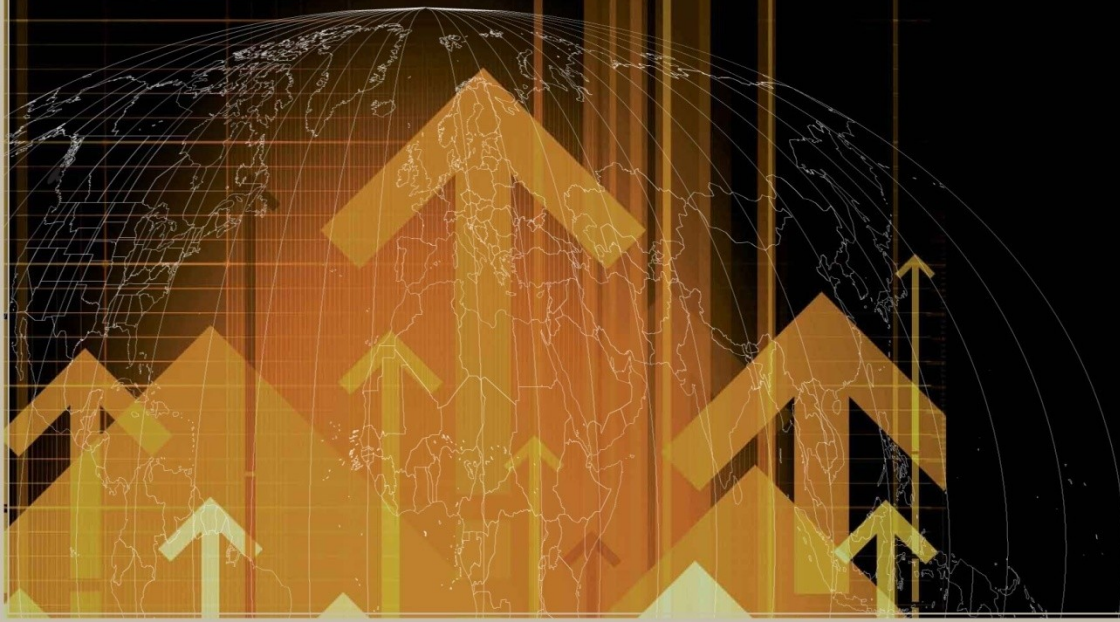


## New Solutions and Modern Technology



Trican  
Well Services

Good Afternoon Ladies & Gentlemen and Esteemed guests !

Our industry is driven every day to provide new idea's , new technology, and, new work practices that reduce the cost of production , protect the planet we live on and protect the specialists who every day work in our high risk industry.

Today I would like to discuss the topics of Modern Technology and a New Industry Solution , so what is Technology do any of us really know what it means and how we apply it to our industry.

## Technology

The word Technology was created by the Greeks back in the 17th Century, the English dictionary describes the word as

*The branch of knowledge that deals with the creation and use of technical means and their interrelation with life, society, and the environment, drawing upon such subjects as industrial arts, engineering, applied science, and pure science.*

Seismic monitoring is a technical means originally developed to monitor subsidence around the world, our Industry experts have adopted this technology, engineered new equipment and computer programs, applied practical and physical science and pure science in the form of geological data, can now display in real time a events beneath the ground.

The development of real time Micro Seismic monitoring is now showing our industry the earth many kilometers beneath our feet as we apply hydraulic fracturing force's to it, being able to see the movement of the rock beneath us has helped our engineers predict firstly the movement of the rock and secondly the intricate path fracturing fluids and proppant take during a hydraulic fracturing operation.

Today Shale Gas is a hot topic around the world with millions of dollars being invested, investigating, evaluating and securing Shale reserves.

We as an industry understand "Shale Gas", we know what it is and we all know how to safely find, stimulate, and transport it to thousands of homes around the world

Unfortunately, negative media attention and the publication of a number of international reports into the exploration and production of Shale Gas is having a negative effect upon international exploration and production of shale gas.

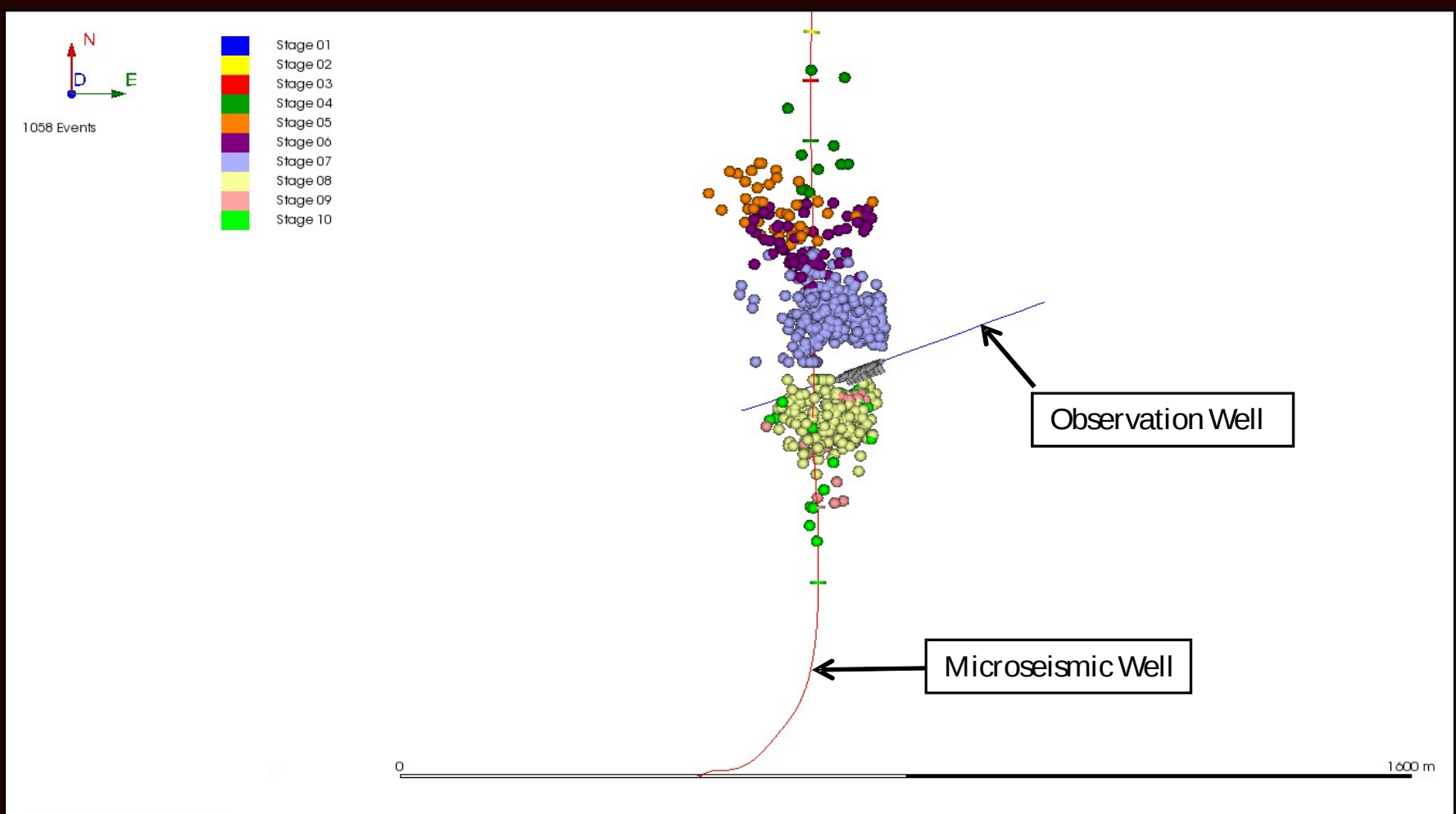
Media reports imply that "Fracking" is causing damage to our environment, however, to date Scientists have not been able to prove that "Fracking" has or will in the future damage this planet of ours and the people that live on it.

As I have mentioned earlier, the data gathered from Micro Seismic technology coupled with geological data, field or well production profiles, powerful analysis software is now providing the industry with real fracture data maps that show us the extent of a fracture and is able to calculate the dimensions of each fracture zone well before equipment arrives on location.

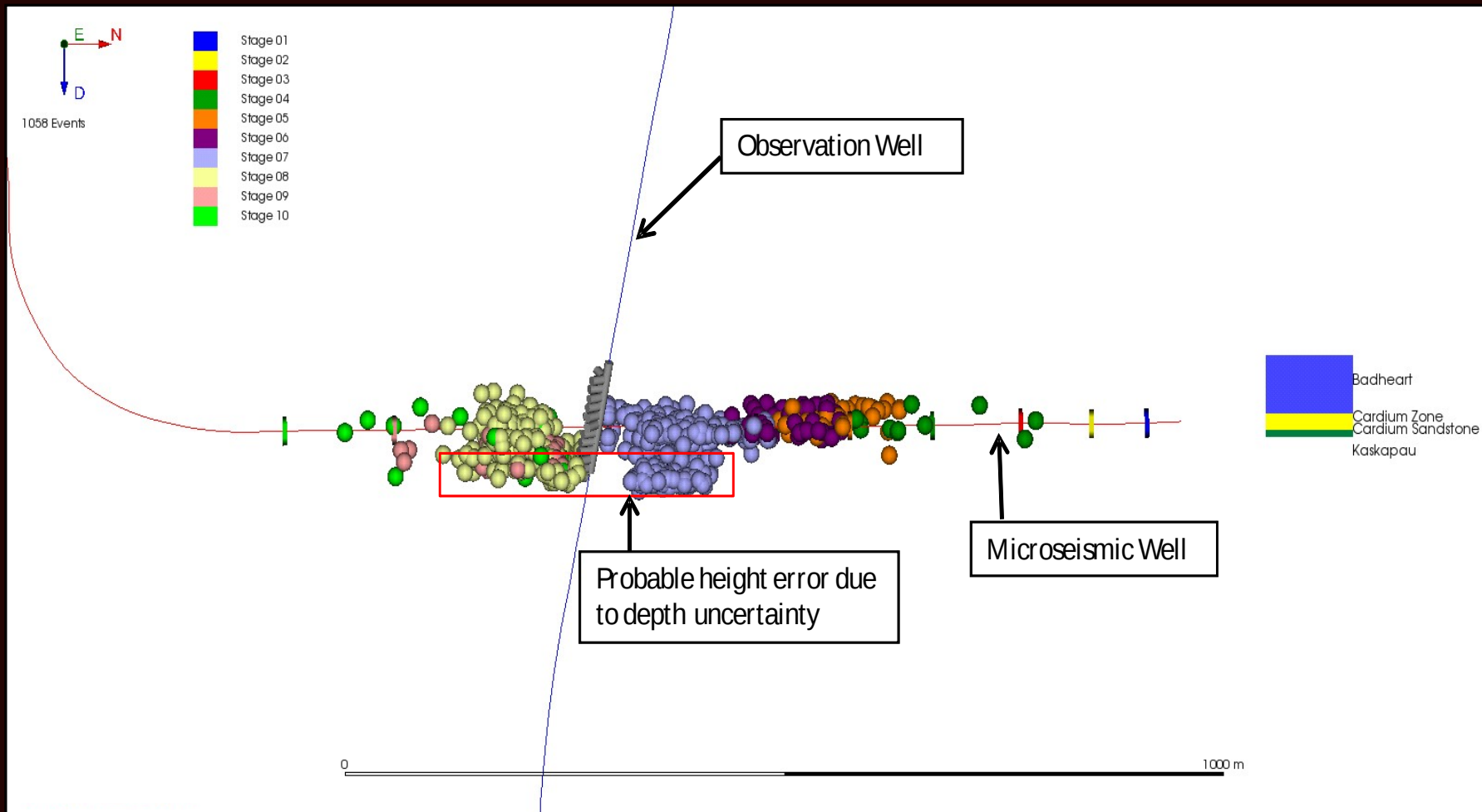
I promised to be quick so here is the first of my six power point slides



# View of a wellbore looking directly down from surface after a frac treatment



Shows the same wellbore but from a side elevation



The data gathered to create the two previous slides can now be used to develop even more information.

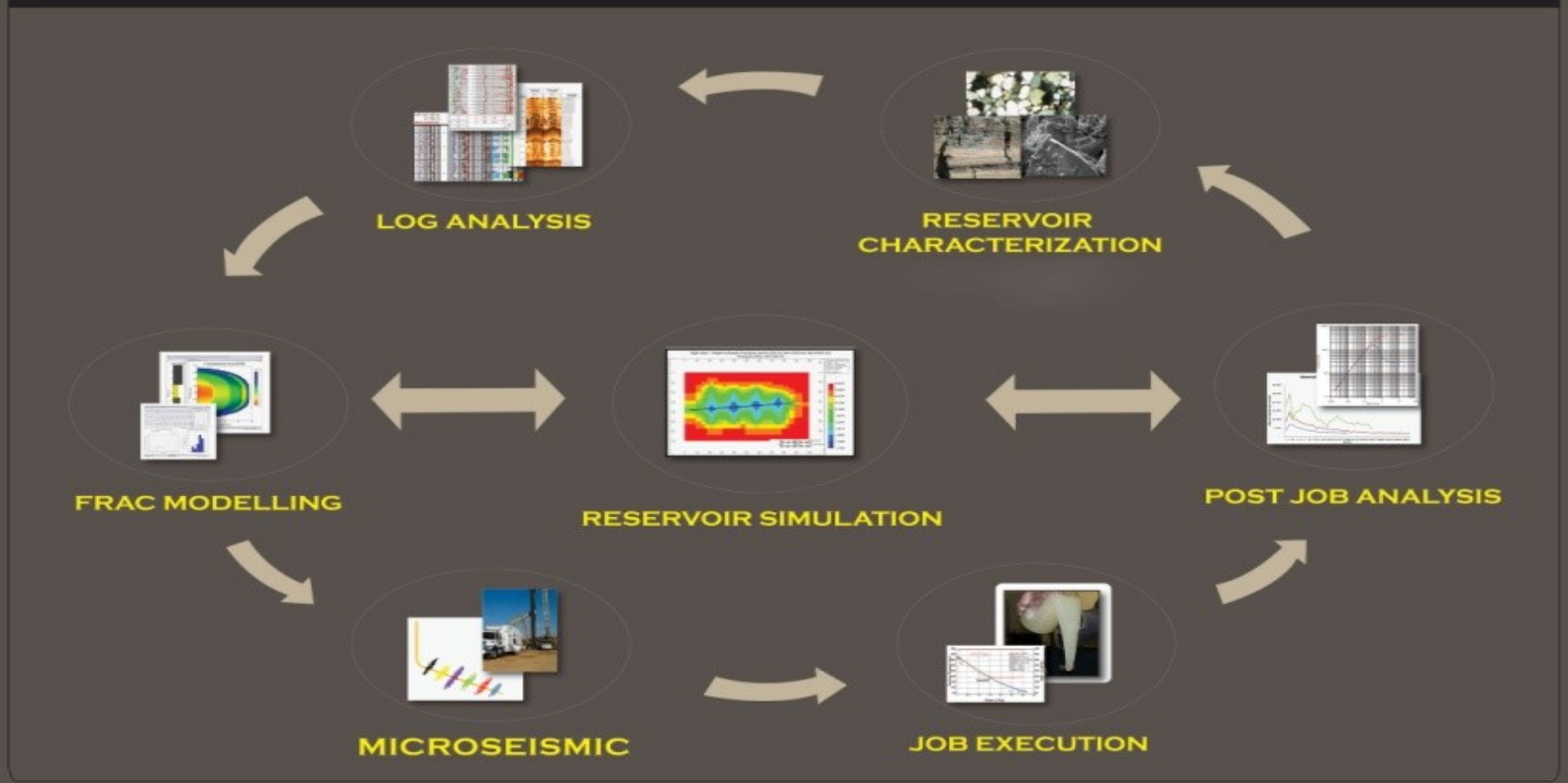
Being able to see and predict in advance fracture boundaries ensures water zone contamination does not take place, and our environment is not damaged, advanced in depth geological mapping and fracture simulations can now predict wellbore events before they happen.

Our industry develop' s new technologies every day, the initial development of Seismic technology to monitor fracture propagation has, today grown into powerful industry tool that Gathers date from many sources and then predict events during a fracture operation before they actually happen.

And so we come to slide three of six



### Integrated Optimization Process

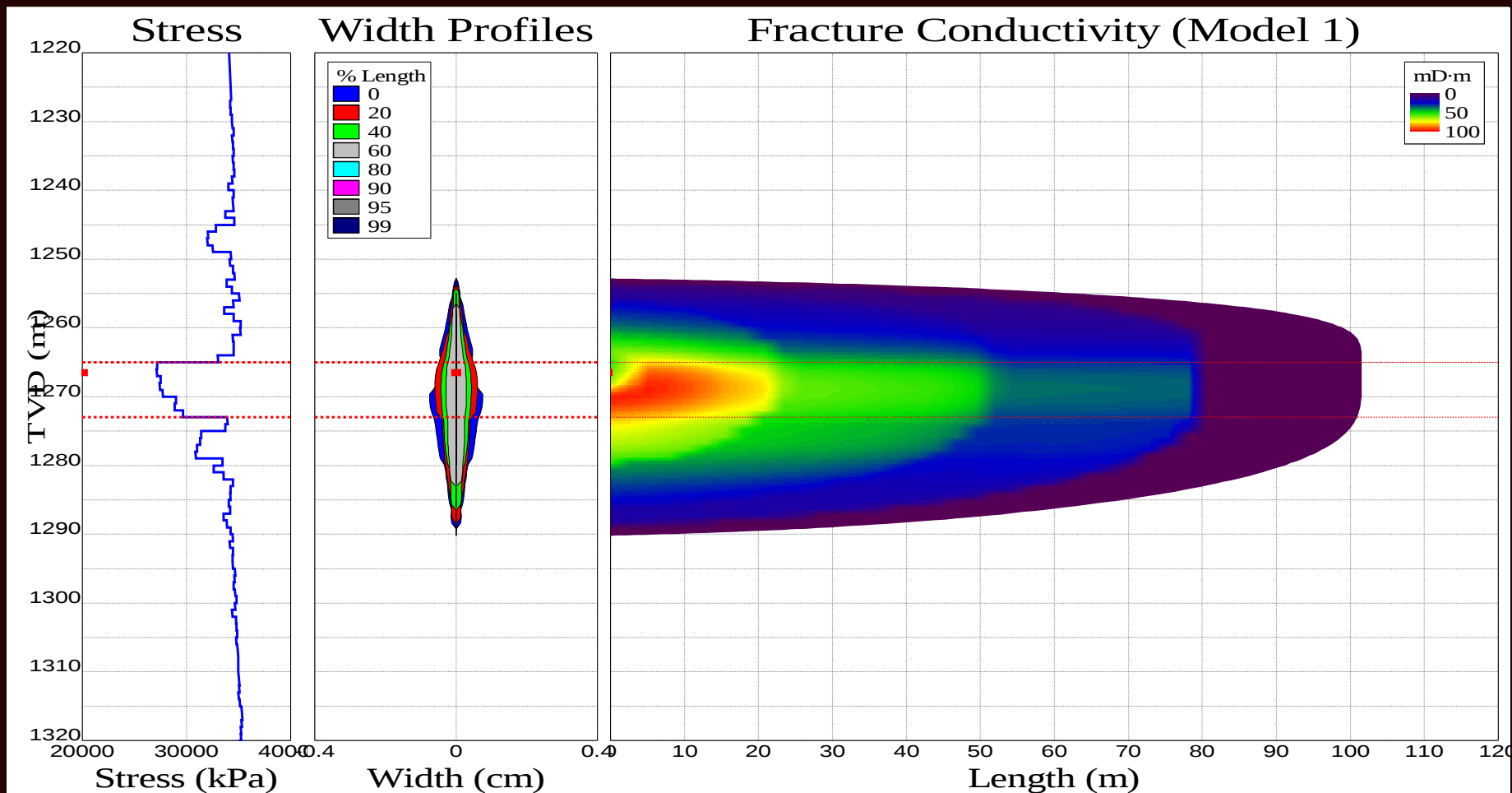


Integrated software programs are now, today providing international operators with advanced predictive modeling that is physically reducing the amount of equipment, chemicals, water and proppant required for each hydraulic fracturing operation.

You can see from the slide that data from many sources is required before an depth analysis can take place.

Today this advanced predictive technology is providing data that is being used to optimize the long term production life of a well.

And here we have slide four

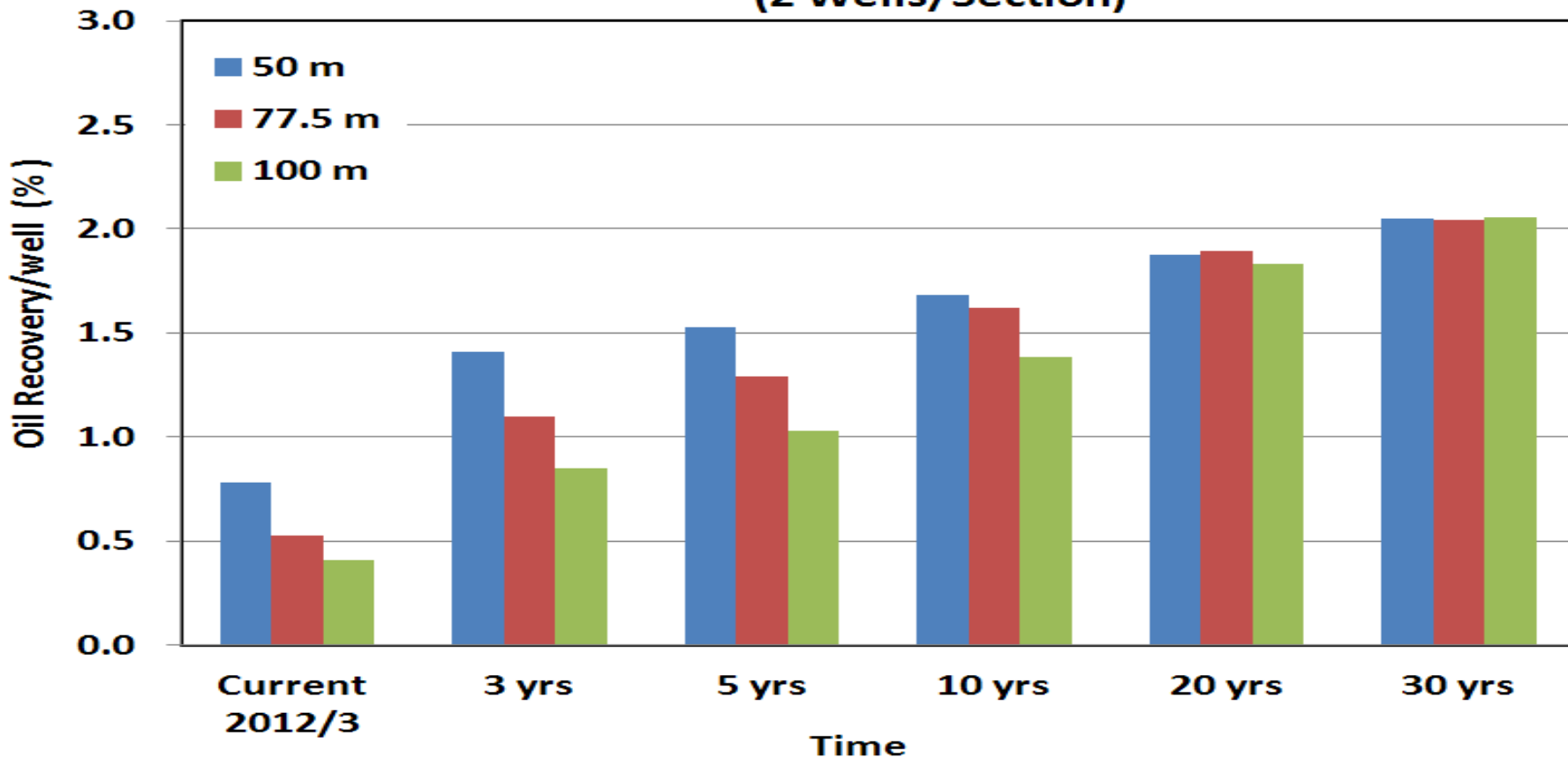


This slide shows the Fracture conductivity after a 15 tons frac has taken place , you can see that the actual dimension's we are seeing from the gathered data are quite small and in some cases are only millimeters in size, however as we all know bigger isn't always better .

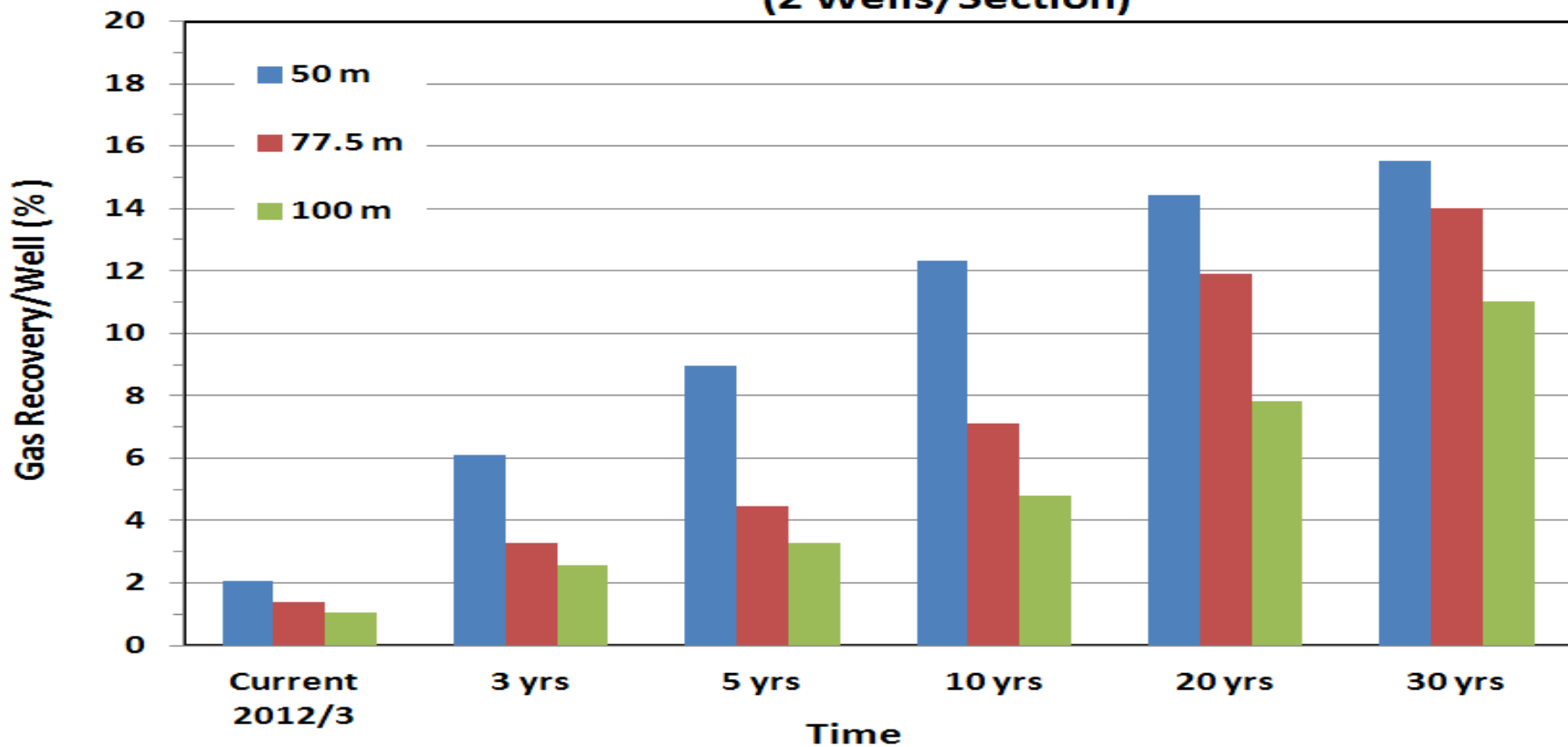
Long term sustainable production is key to the success of any project not only does it provide positive investment opportunities , it can provide more efficient energy planning and effectively manage the environmental impacts of the project.

The next two slides are examples of how the software and data analysis is now helping IOC's to maximize their investment.

**Effect of Frac Spacing on Oil Recovery Factor  
(2 Wells/Section)**



**Effect of Frac Spacing on Gas Recovery Factor  
(2 Wells/Section)**



Further analysis of the potential reserves in America is now reportedly stating that America could be Gas Independent for 100 years.

From seismic event monitoring to predictive, well production optimization in a few years. Not bad for an “old” technology.

A few years ago I would not have been able to stand in front of you and talk about seeing the earth move beneath our feet , but today it is a reality.

Ukraine is today on the starting line, the starting line of its development of its existing Oil , Gas and Condensate production , its entrance into the exploration and development of “Shale Gas” and Coal Bed Methane , and its integration into world energy production and distribution with its LNG Terminal, and let us not forget its entrance into the Hi Tec Offshore drilling and production arena in the Black Sea.

Seven separate projects , hundreds of technical challenges , thousands of individual ideas and solutions , with careful management, adoption of western technology and work practices , Ukraine could in the not too distant future place itself at the forefront of adoption of the latest Oil & Gas Industries Technology

## QUE FRAC FEED

My time in front of you is almost at an end, I hope I have provided you with a small insight into a New Technological Solution that is available today, tomorrow it will “Upgraded” however we can always be assured that the industry and the people that work in it will continue to grow our knowledge and create unique cost effective environmentally safe solutions we can all be proud of.

I would now like to share with you some live technology, what you are seeing on the screens at the moment is a live frac job being performed in Canada right now.

What you can see is the pressure being applied from surface, the actual pump rates of the treatment and the total amount of Proppant or Sand being placed into the well, the screen display can be customized to suit our clients requirements.

This live feed data is available to all of our clients and provides their own Engineers, from the comfort of their office the ability to watch and receive real time data from there well site instead of waiting for a final report to be filled.

I thank you for your time and your indulgence.