



## Employee Care

At WSI, we believe that creativity, energy, and expertise of our people is the foundation on which we build our success. Therefore, our ability to attract, develop, motivate and retain outstanding individuals is essential to the future of our business. Below includes Personal Principles highlights:

- Respect and care for individuals and their families
- Promote diversity of nationality, culture, gender, and thoughts
- Train and develop people continuously throughout their careers
- Promote from within, based on performance of potential
- Offer border-less career opportunities
- Recruit where we work

Extracted from WSI Policies.

## this issue

Welcome Message **P.1**

Employee Care **P.1**

WSI News **P.2**

HSE **P.3**

Technical – DCS **P.4**

## Welcome Message

Dear WSI's management and personnel,

I would like to take this opportunity to extend my warmest congratulations to you on the publication of the first edition of WSI newsletters. WSI conceives this initiative as a perfect platform for communication with employees and prospects through which it can raise awareness on the company's organizational culture and promote new business initiatives, developments, and challenges. In addition, this effort will positively facilitate promotion of Schlumberger's method of operation to follow along the leading oil industry organizational practices, which will build confidence within the community. WSI strongly believes in its employees as the core value and asset of the organization. Thus, it is essential to provide employees with an opportunity to be part of WSI progress and to offer their feedback on its organizational behavior.

I am confident that by promoting and providing effective communication means within the company, both the business and its employees' performance will be significantly enhanced.

Sincerely,

Naser Abdollahi

WSI Chairman of the Board

Dear colleagues

WSI is eager to give employees a chance to offer their feedback and sentiment on the newsletter contents and organizational changes to promote culture of feedback. To enrich our newsletter, we will appreciate it if you send us your news as well as views.

[newsletter@wsi-oilfield.com](mailto:newsletter@wsi-oilfield.com)

**"Great vision without great people is irrelevant."**

— **Jim Collins, Good to Great Book**

**"The difference between who you are and who you want to be is what you do."**

— **Unknown**

## Happy Birthdays

We would like to extend our congratulations and birthday wishes to the following colleagues for having birthdays in July and August. May this year be so much better than the last for you in every walk of life. **We wish you all the luck, good health, and prosperity!**

- Mehran Mousavi (A)
- Zahra Hosseini (A)
- Mohammad Amin Taherian (A)
- Paria Pouria (A)
- Mohammad Ghazanfar (K)
- Mostafa Nozarian (K)
- Afshin Astaneh (K)
- Reza Zare zadeh (K)
- Mokhtar Peeri (K)
- Mohsen Kiani (K)
- Alireza Saleh Khoramabadi (K)
- Amir Tehrani (K)
- Pouriya Hamrang Rouyandzagh
- Bahador Jozani kohan (K)
- Ali Mousazadeh (K)
- Moslem Kazemi Dehziri (K)
- Jalil Ghorbani Bavani (K)
- Ali Abdollahi (K)
- Ayoub Nazari (K)
- Yousef Sarlak (K)
- Dariush Ezzatzadeh (K)
- Reza Khoshkhouei (K)
- Ahmad Delshadi Gabrani (K)
- Ardeshir Alizadeh Ardebili (T)
- Maryam Abareshi (T)
- Ali Kia Shemshaki (T)
- Amin Mostofi (T)

## Condolences

It was very sad for us to hear Mr Roosta lost his beloved son in a car crash. WSI personnel are deeply saddened by your loss, our hearts go out to you and your loved ones. May care and love of those around you provide comfort and peace to get you through these hard times.

## Job Vacancy

- Methods and system development engineer
- HSE coordinator

## R&D News:

WSI sponsored the 8th Offshore Industries Conference (OIC) at Sharif University of Technology, 11-12 June.

WSI in partnership with Sharif University of Technology announced the first Innovation Challenge titled "Artificial Intelligence in Drilling" at Tehran Oil Show and awarded the winner team in a ceremony at university last June. The PySQL Team (Kave Shaygan, Alireza Elahi) was the winner for a proposal on "A Rig Connectable Optimization System for Drilling Operation" and is negotiating with WSI R&D to materialize their idea.



Over this period, we received several ideas about "AI in Drilling" and couple of proposals as follows for WSI Innovation Fund,

- "Dynamic annular pressure control system in MPD & UBD operations" (Status: **In review**)
- "Microwave fluid identifier tool" (Status: **In review**).

If you see an opportunity to improve WSI, please talk to us via [research@wsi-oilfield.com](mailto:research@wsi-oilfield.com).

[www.wsi-oilfield.com/research](http://www.wsi-oilfield.com/research)

# What's going on in **WSI!**

**WSI** was awarded a 24M Euros contract by NISOC to provide well logging services.

**WSI** has mobilized the team for NISOC project and carried out many jobs, way ahead of the schedule.

**Gulf Pearl** is on the way back home with 3.5M USD refurbishment, hopefully will be missioned for PGFK project.

**Petro Iranian Arvand** was awarded a Call Out contract worth 2.5M USD for provision of directional drilling.



**WSI** had a very successful presence in Tehran **OilShow 2019**. WSI welcomed many professional delegates from oil industry and had meetings with top management of our clients including:

- KEPCO, Mr. Osouli (CEO)
- Exploration Directorate, Dr. Hendi (CEO)
- DCI, Dr. Jamalzadeh (CEO)
- Petroiran Development Company, Mr. Sepehri (CEO)
- Arvand Oil & Gas Company, Dr. Pourhang (CEO)



## Welcome to New Colleagues

- Amin Mostofi – IT (T)
- Afsoon Jokar – R&D (T)
- Nazita Sedaei – OFS (T)
- Ali Nouraei – OFS (T)
- Mojtaba Bahmani – IT (T)
- Mani Mohammadpour – IT (T)
- Naser Alizadeh – DCS (T)
- Alireza Sadeghi – WL (A)
- Iraj Pirayesh – WL (A)
- Ebrahim Nazari – WL (A)
- Sajad Sajedi – WL (A)
- Omid Eghtesadi – D&M (T)

## Tips for Eating Healthy at Work (Part 1)

### 1. Don't Skip Breakfast:

Skipping breakfast is the fastest way to lose focus, energy and patience in that long mid-morning meeting. Keep you feeling full and satisfied until lunchtime. For example, you can choose to prepare some oats the night before or pack a couple of healthy cereal bars.

### 2. Plan Ahead

Plan out your meals in advance before you go on your weekly supermarket shop. Think about the full week, including breakfast, lunch, dinner and snacks, and write down what it is you plan to eat that day. It will help you stay on track.

### 3. Buy Things Prechopped

You can purchase diced chicken and stir-fry veg to make a quick and easy meal in under 15 minutes, for example, or chopped butternut squash to make a simple soup.



## ISO 9001-2015 Initiative:

WSI proudly announces that the ISO-9001 certification process has officially started, beginning with PI-Arvand, on June 15th, 2019. ISO standards (Quality Management System) are used and practiced on a day-to-day basis by great organizations throughout the world to demonstrate the ability to consistently provide services that meet and exceed customer and regulatory requirements. However, this will not be possible without the close cooperation and support of the ISO team and personnel. This initiative demonstrates the top management's commitment and dedication to promote quality and operation's efficiency to place the business on the path of success.



## New garment designed to save lives offshore:

A prototype of a garment which could save the lives of offshore workers in the event of an accident at sea has been unveiled in 17th January 2019.

Dundee-based Iron Ocean has worked with the Oil & Gas Innovation Centre (OGIC) and Heriot-Watt University to develop the Centurion 3, an offshore survival system which comprises of a three-layers (tear resistant, fire retardant and compression fit), making the Centurion 3 less bulky and restrictive compared to traditional suits, giving the wearer increased mobility and protection. Current garments worn under the survival suit do not provide active heating.

Consequently, immersion into the cold waters of the North Sea for instance, causes the body temperature of the wearer to very rapidly decrease with an estimated life expectancy of 10 - 12 minutes.

By comparison, the newly developed material incorporated into Centurion 3 immediately activates when in contact with water and produces a heat output above the average body temperature for more than 20 minutes.

Iron Ocean has also been shortlisted for the HSE Innovation accolade in the 2019 Offshore Achievement Awards, which recognizes developments which have improved individual, plant or operational safety.

## The clock is ticking on your hard hat:

Have a look at the date stamp on your hardhat you might be surprised!

As a general guide, industrial safety helmets should be replaced three years after manufacture, but always check with the manufacturer.

Here we have some example images of different date stamps. Each helmet, when manufactured, has a year and month of manufacture stamped onto the inside of the shell near the peak for easy reading. In the first image on the left the arrow in the stamp points to the month and the year overlays the arrow. So, the arrow Points to 9 and the number is 04 means that the helmet was manufactured in September 2004.

In the second image on the right the 07 represents the year 2007. You then have 4 segments 2 at the top and 2 at the bottom of the year this represent the year being split in four periods. You can see from the image that the top two segments have dots in them which means it was manufactured in the second quarter of the year. Therefore, manufactured in April to June 2007.







## A success story from **DCS Team**

**Challenge:** PEDCO requested WSI to do a reservoir fluid sampling job in South Pars Oil layer. Sampling was planned to be done from horizontal wells, the first of its kind in Iran. Running tool in horizontal well, where formation fluid bubble point is very close to pressure of reservoir means that the large pressure drawdown during sampling would cause resolved gas to come out of oil and makes the sample not a true representative of reservoir. There were vague porosities some connected and some not. Moreover, there were breakouts and irregular wellbore shape across the horizontal well. The first job was carried out, an Image Log was run, next MDT with LFA was run. Different zones from heel to toe of the well were tried back and forward but most of the times plugging of MDT flow line was experienced. In many cases dual-packer MDT module could not reach a good seal and experienced lost seal tests. Due to well conditions and lack of enough data, the first job could not be successful.

**Solution:** DCS team decided to run X-Y caliper in the well prior to MDT, to learn the shape of wellbore from heel to toe (where accessible). MDT was to be run slowly, only in forward direction, to avoid contamination of mud with rock powder in wellbore. Before sampling, tool was to be stopped and not to move for 5-10 minutes in order to reduce the risk of solid particles being mixed with mud and enter flow line. MDT single probe was deployed to estimate mobility, then Dual Packer was set to take sample with minimum pressure drawdown. Where seal of MDT Dual Packer was successful, pump out was started to take samples every 1-2 hrs, so if pump of the tool fails we would have something, (not to pump and wait for ideal conditions and then take sample). MDT LFA results was planned to be monitored real-time and to be sent to DCS while the job going on, to know when reservoir fluid enters MDT flow line and make best decision for sampling time.

**Result:** A second well was the candidate for MDT by client, based on the lessons learned. PEDCO agreed to get more logs and have more data in order to design the MDT job better. All required data were acquired and analyzed before MDT sampling job. The second MDT job was run, best point to get sample was sealed by MDT Dual Packer and then reservoir fluid was pumped until 12 bottle samples were filled. The last three bottles had representative reservoir fluid. The very challenging MDT job went successful, with more than 1 million US\$ revenue for WSI.

**Movement of long-heavy MDT tool across horizontal well makes the formation rock to break into powder. If mixed with mud, it makes the mud a slurry with fine solid particles that plug flow channels where enters. That was why in the first MDT job, plugged flow line was experienced. Many lost seal points showed that wellbore breakouts and irregular wellbore shape is a serious issue.**

## Pulsed Eddy Current (PEC)

PEC measures multiple thicknesses of both the inner and outer tubing. This allows a quantitative evaluation of corrosion without having to remove any tubing. The key to using this is understanding how the tool responds to pipe thicknesses. It works by supplying pulsed current into the transmitting coil of the tool. There will then be a time-varying electromotive force (EMF) in the receiving coil.

If there is any thickness variation, faults or flaws in the pipe string the induced EMF will be different from its expected level. This technology has multiple uses. It can measure the thickness of tubing, detect corrosion and damage, and detect horizontal and vertical cracking. GOWell Petroleum, who use this technique, say the technology still has room for further development including the evaluation of a third pipe and increased power. [Read more: \(https://www.eddyfi.com/technologies/pulsed-eddy-current-pec/\)](https://www.eddyfi.com/technologies/pulsed-eddy-current-pec/)

