



November – December 2011

HRES operations have been successfully completed in transition zone of the North Caspian Sea.



The HRES (High Resolution Electrical Survey) Technology testing program was conducted in complex conditions of extremely shallow waters of the North Caspian. About two hundreds kilometers survey was completed successfully in 3Q2011. Operations were carried out at the same time with 2D seismic survey (PGS-Khazar) on lines crossing the location of drilled wells and targets identified by seismic.

The obtained results allowed the Clients to evaluate prospects of main plays and leads and specify the exploration program.

HRES study will be continued next year in order to determine the optimal points for exploratory wells locating.

Soliton Ltd experience confirms that the integration two independent methods as seismic sp;and HRES increases the drilling success ratio up to 70-75%.

Five projects on Lukoil contract blocks in Volgograd region have been completed.

As a result of integrated HRES survey 47 anomalous objects were detected on the study areas. They are associated with anticline structures and in alluvial fans zone. An extensive detail study of local anomalies are recommended.

Based on integrated interpretation of HRES anomalies and seismic data a possible presence of prospective targets – carbonate buildups were detected in the area. Recommendations on exploratory wells location are designed.

Soliton LLC technologies enter the international market

Geophysical operations using the HRES technology (Soliton Ltd) were initiated in the Province of Alberta (Canada) in November 2011.

Testing of this technology on the proven oil fields and in areas with extremely difficult surface conditions of the North Canada are planned.

Soliton-DMIGE Consortium has completed two big projects in the South China Sea



Over 7000 km of lines we completed using the HRI method (designed by Soliton ll for deep-water condition during 2010 - 2011.

The results of HRES prognosis allowed customers to correct the drilling program in time and obtain commercial oil flows in all four wells drilled.

Continued HRES operations next year will allow the customer to specify their program for development of license areas.

The Final Report of marine-electric survey studies on the Vietnam continental shelf was approved.

The Technical committee of "Vietgazprom" JV has approved the Report on the results of marine electrical survey at blocks 129-132 on the Vietnam continental shelf. The Report was presented by the "DMIGE Soliton" Consortium in September 22.

The meeting was attended by experts from Vietgazprom CRS, PetroVietnam CDG, Gazprom Zarubezhneftegaz JSC, Corporation for oil and gas exploration and production (PVEP). It was mentioned that all geological tasks were completed in full.

Ranking of local structures according to their prospectivity was made. Vietgazprom plans to use obtained HREM data to select sites for exploratory wells drilling on the 129-132 blocks.

Integration of Electrical and seismic surveys data reduces drilling risks

Analysis of Soliton ltd operations results for the period from 2006 to 2011 confirms an increasing the success rate for oil and gas wells drilling up to 85% compared to 62% over the previous five years.

Using IP method, China National Petroleum Corp. (CNPC) has achieved a drilling success rate of 73% (based on 65 wells).

The Director General of Hydrocarbons for India recently presented a case study showing a material improvement in offshore India discovery rates, from the 20% level to more than 50%. He attributed this increase to an improvement in the geological understanding of the subsurface and the continued use of [EM] survey technology.