

WELL LOG INTERPRETATION WORKSHOP

SPG Ahmedabad Chapter in association with SEG, SPG & EAGE Chapters of PDPU



It is said that logging is the eye of Oil and Gas industry. The student chapters of SPG, EAGE, SEG and AAPG in PDPU organized Well Log Interpretation Workshop on 6th September in collaboration with Institute of Reservoir Studies (IRS) ONGC. The workshop received an overwhelming response with an attendance of more than 150 students of PDPU. The event was graced by eminent Geophysicists and Geologists from ONGC IRS and faculties from PDPU. We were truly honored and privileged to have Mr. Rakesh Kumar Sharma, Executive Director and Head IRS ONGC. He was accompanied by

1. Mr. Indrajit Dasgupta (Chief geologist)
2. Mr. A.P.P. Singh (Dy. Supt. Geophysicist)
3. Mr. Rajesh Kumar (Dy.General Manager)
4. Mr. P.P. Deo (Dy. General Manager (W))

The session began with a talk on Geo-cellular modeling by Mr. Indrajit Dasgupta. He talked about various parameters of static and dynamic modeling along with the assumptions involved in various models. The next talk was by Mr. A.P.P. Singh, Dy. SG (wells) and he presented on an

Overview of Well Log Data Acquisition. This encompassed history of logging and its evolution, role of logging in Oil and Gas industry. He detailed various logging techniques and tools used for open hole, cased hole and production logging. He explained working principles, elicited the parameters measured and mentioned the applications of electrical logs, porosity logs, formation structure logs, pressure logs, side wall coring, depth correlation logs, production logs and high tech logs (DSI, Formation Imager, NMR and CHFR tools). The entire session was highly interactive and the curiosity and inquisitiveness of students was appreciable. The experts from IRS were pleased to reply to queries from students and clarified their doubts. Mr. Singh continued on tirelessly and explained the importance of cement evaluation, perforation, plug setting, cutter, back off services, shaped charges. He ended with a brief on importance of production logging and production logging tool string (telemetry cartridge, Gamma, CCI, Pressure, Hydro, Density, Temperature, centralizer and spinner). The seminar continued and the post-lunch session started with a very interesting talk on Formation Evaluations by Mr. Rajesh Kumar CG (Wells). He spoke about fundamentals of well log interpretation and parameters calculated by using well logs. The properties that can be measured by logs are porosity, shaliness, density, water saturations etc. He reiterated the importance of calibration of tools which ensures good quality log data. He talked about effects of drilling mud, depth alignment, hole size, hole rugosity, barite effect, salinity and temperature on log data. He then talked about flow profile and casing/tubing caliper, etc. A test was conducted to check the abilities of students on well log interpretation and students were asked to calculate various parameters. The logs were tough to interpret but when they were discussed by experts the

students found the answers explicit and manner of explanation was lucid. Students in small groups discussed the answers and inferences with instructors. Finally, Mr. P.P. Deo talked about petroliferous basins of India (Assam, Bombay, Cambay, Cauvery, Krishna Godavari, and Tripura Cachari) their properties, reserves and production history. As the scale changes so does the picture. He talked about vertical resolution and depth of investigation of logging tools. He also delved upon porosity and permeability variations in sandstones and limestones. He gave us the microscopic and macroscopic picture of reservoirs. He also delineated coring and reservoir characterization. He showed various images of cores and oil samples. The seminar breached all timelines and deadlines but neither the instructors nor the students lost energy and eagerness to learn and share their viewpoints. Mr. Deo ended the workshop on a philosophical note by and urged the students to imbibe and apply their knowledge as an “integrated whole”. The workshop concluded with final words of appreciation from Mr. P.P. Deo, Dr. Ashish Sarkar (Faculty at SPT) and Dr. Uttam K Bhui (Faculty at SPT). We convey our sincere gratitude to all the stakeholders for helping us organize a very successful workshop.

The photos attached below bear a testimony to the success of the event.....



Prof. Ashish Sarkar welcoming HOI, IRS and Chief Guest Shri.R K Sharma



Eminent Geophysicists and Geologists sharing the stage



Introductory presentation of usage of Well Logs



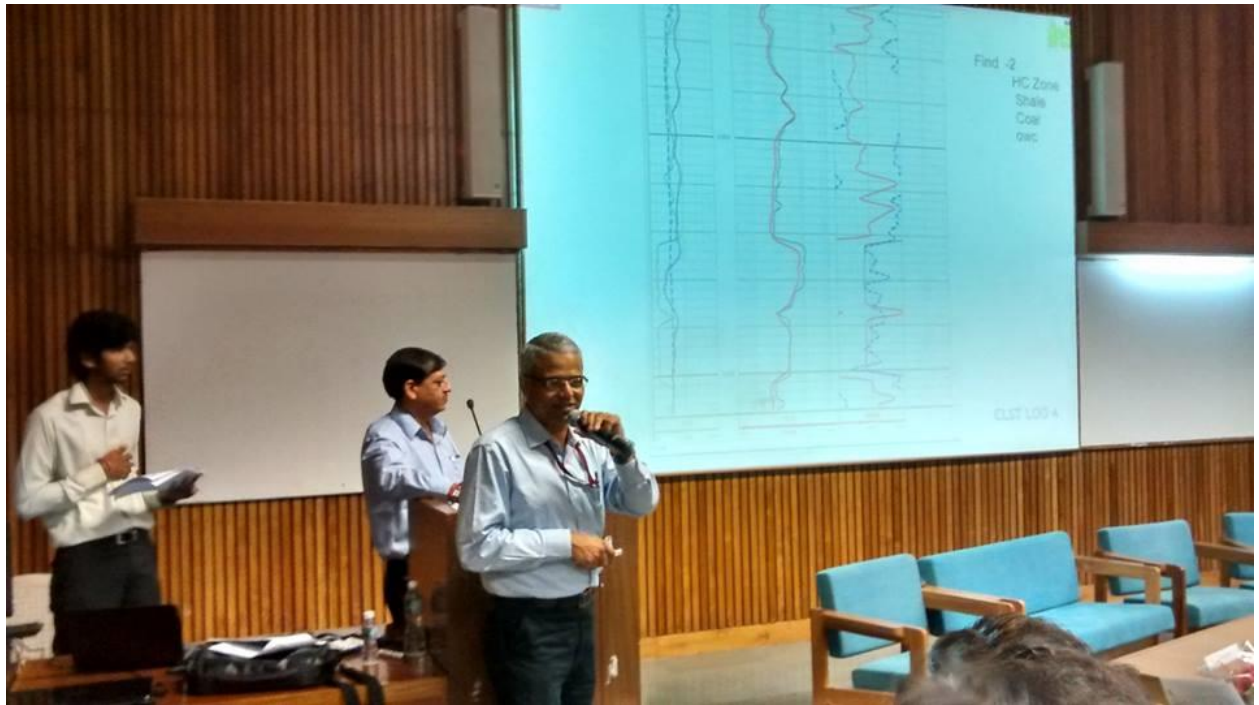




Students learning with keen Interest



EXPERT and EXPERTISE!!!!!!





Students getting hands on Well Logs!!



Students seeking clarification



Everyone has an opinion!!!