**Claim 10 Taking Action**

The oil company I worked for had just purchased an oil lease with an established production. As the Petroleum and Reservoir Engineer for the asset, my role was to increase the oil production. The initial task was to evaluate all the fields, investigate each individual well, identify in-wellbore opportunities, propose a work-over programme to management and, if approved, execute the work.

The historical data was not in good order so the first task was to correlate the well data, write a historical sequence of events for each well and evaluate the production profile and forecast to determine the reserves for each of the fields. The geologist estimated the original oil in place to determine the recovery factor. The recovery factor is a useful tool for understanding the potential of enhancement projects.

Nine projects were correlated and developed. This included; rejuvenation of suspended wells, comingling production, water shutoff, perforation of new zones, re-perforation of produced reservoirs and an artificial lift upgrade. Each of these projects needed to be evaluated and costed. The valuation process involved creating a base forecast and project forecast. The estimate of the project's required capital was primarily based on experience. Workovers throughout the company were on a continual basis so I understood the expected expenditure. Based on this information, I built an economics model to evaluate the monetary benefit.

The following task was to seek funding by firstly creating a document describing the project, outlining the risks and presenting the economics. Once approved by my manager, it was presented to an internal company committee to justify budgetary expenditure. Upon approval, the document was sent to the external Joint Venture Parties for approval.

After the project gained approval, I proceeded with the procurement and transportation of equipment to the site. Once I gained a slot in the workover rig schedule, the logistics and approval time table were established. The relevant service companies were contacted and informed of the dates that the workover rig would require their services.

Each of the workovers required a detailed written program. Due to its importance, this document had to be revised and signed by technical peers and engineering management. Safety protocols and systems must be in place and procedures adhered to prior to implementation.

When the workover rig arrived, stringent on-site safety management, methodologies and procedural matters were adhered to. The rig supervisor or company man was the on-site manager of the operations. Morning reports describing the last 24 hours operation were transmitted to the company's office. Each morning and evening I telephoned the rig supervisor to discuss the operations and assisted him when required.

During the workover and commissioning operations, I made many trips to the site to ensure I was satisfied with the operations and understood any problems they encountered. With any unusual or critical operation I like to be in attendance so that if there are any issues, I have firsthand knowledge of them.

At the completion of the workover, the well was handed back to the field personnel for commissioning.  This program had an excellent outcome and encouraged management to consider development drilling.