

PetroSkills CAT (Competency Analysis Tool)

At the core of defining an individual's overall competency level is the PetroSkills CAT application.

The Competency Analysis Tool integrates the PetroSkills Competency Maps, training, and work experiences, as well as any company-specific in-house courses into the application. Finally, the Oil and Gas Industry has a custom application that can track, manage, and report on employee learning while ensuring that technical personnel are competent by identifying organizational and discipline-specific competency gaps.

Junior Reservoir Engineer - Required Status				
Reservoir Engineering Competency Map				
Geoscience				
Fluid Properties				
Skill	Awareness	Fundamental Application	Skilled Application	Mastery
Oil, Gas and Water Fluid Properties (1)	Describe the basic fluid properties of oil, gas and water.	Determine fluid properties from physical measurements and industry standard correlations and understand the	Identify inconsistencies in the fluid properties data and use and modify standard correlations to agree with field measured data.	Develop or enhance PVT correlations for distribution to others and use fluid property analysis to differentiate the origin of various hydrocarbons.
Oil, Gas and Water Fluid Properties (2)	Understand the concepts of flash and differential liberation	Describe various reservoir fluid separation processes, such as flash and differential liberation and specify the correct	Determine impact of the major parameters of hydrocarbon phase behavior on the production process.	Use compositional approach to verify and extend fluid property values obtained from laboratory tests.
Oil, Gas and Water Fluid Properties (3)	Understand the phase behavior of oil, gas, and water as it is produced to the well, up the well and through facilities.	Design fluid separation process to maximize product revenues.	Develop separation procedures designed to maximize liquid production or other desired production targets. Integrate	Use compositional approach to incorporate facility processing into values for oil and gas formation volume
Fluid Sampling and Laboratory Testing of Fluids	Describe various fluid sampling methods, tools, and techniques.	Specify methods and tool characteristics for sampling hydrocarbons; both downhole and recombined	Design sampling programs for various reservoir conditions and fluid types. Review	Design and carry out numerous fluid sampling programs. Critique data quality and advise others

CAT empowers technical personnel to take ownership of their own career development and provides immediate visual feedback which will identify personal competency and knowledge gaps and help to guide professionals in selecting courses and learning programs which will close those gaps.

The CAT methodology allows professionals to create collections of "Core Competencies" for their organization. This ability enables supervisors to create custom positions within CAT that reflects the needed skill sets for job levels--either within their organization as a whole or within specific discipline areas such as Reservoir Engineering or Petrophysics. This ability helps technical personnel to quickly and easily see the skills that are critical for their overall competency level within their positions, to assess themselves on those skill descriptions, and to take courses/training to help fill the gaps in their development. CAT provides an objective assessment of individual knowledge and capability.

Employees can use CAT at anytime-to update their personal assessments, to view their personal development plans and to gain access to training resources. Supervisors can monitor their group's competency quickly and can generate numerous reports which identify gaps by both individuals and group.

What will CAT do for your organization?

- Create tree structures that reflect your organizational structure and job disciplines.
- Set compliancy standards that can be easily monitored.
- Customize the various E&P, Facilities and HSE maps to create outlines of needed competencies for specific Job Functions.
- Present employees with a summary of completed and incomplete skills.
- Create and assign learning based on those specific Job Functions.
- Allow technical personnel to create a 'Professional Development Plan' which helps them close the gap on their current level of competency.
- Provide technical personnel with resources to help them advance their skill-set more quickly.
- Help cut costs within training departments by identifying key courses that would make a greater overall impact on an individual.
- Allow technical personnel to assess their knowledge levels by conducting self assessments.
- Provide technical personnel with a gap analysis report to identify key areas of strength and weakness.

PetroSkills CAT Enterprise Edition

CAT Enterprise will provide all the capabilities contained in CAT, and as an effective human resources management tool, the application reports on critical gaps in technical personnel performance and capability in relation to the success measures and strategic intent of the company. CAT Enterprise provides an objective assessment of individual or group knowledge and capability.

CAT Enterprise is designed to assist management to more easily extract rollup or summary reports which more accurately reflect the training needs of the organization on a global scale. There is also functionality built in for 'Talent Management' which enables management to "zero-in" on specific disciplines or jobs. This capability maximizes the company's valuable human resources and prevents loss revenue and time caused by poor assignment of available, skilled, trained, and experienced personnel that might not be properly identified for critical projects; that is, it ensures that the organization has the right people, in the right places, at the right time. This software also enables the company to view data on geographical areas*. Built into CAT Enterprise is the framework to allow reports to be scheduled and delivered via corporate email to users, supervisors or management; this feature minimizes the need to train key decision-makers on the inner workings of the system, while empowering them with the up-to-date data required to make informed decisions and to complete critical planning.

For more information about PetroSkills Competency Analysis Tool and CAT Enterprise, email us at cat@petroskills.com.