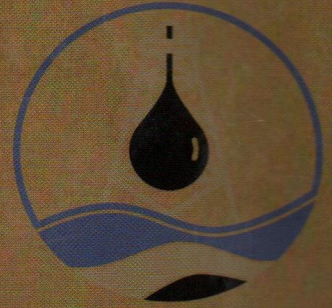


الدورة الثانية عشر لمؤتمر البحر المتوسط للنفط والغاز

The Twelfth Mediterranean Petroleum Conference
and Exhibition

November 20-22, 2012

Tripoli - Libya



MPC2012
PROCEEDING



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world. Exploiting the oil and natural gas has been the engine of growth on the world economies providing both energy and chemical raw materials. Imaging the distribution of oil phases is important to understanding single and multiphase flow characteristics. Gamma ray computed tomography has emerged as an important and powerful tool for non-destructive imaging because it can offer fine spatial resolution and is adaptable to many types of experimental procedures and flow conditions. DSCT machine is suitable for most petroleum related applications based on flexibility, reliability, accuracy and price of the scanner. There are two sources used in this machine. Dynamic phases reaction and process systems are used widely in the chemical, petrochemical industries.

Keywords: Oil, Imaging, Multiphases, visibility, Sources

1. Introduction

Oil and gas are extracted from natural deposits under the ground throughout the world. They are formed from rotting natural materials subject to enormous pressures over many millennia. One consequence is that the actual chemical components of both oil and gas differ depending on where they are found. Multi phase flow occurs when two or more discrete phases are flowing in a closed pipe or mixing in a vessel. In the case of mixing and reactions in a vessel, these are dealt with under Mixing. The phases may be gas, liquid or solid. Different immiscible liquids or solids can also be present in multi phase flows. So to process data for petroleum applications, software can be added to the image processing uses phantoms of oil reservoir, as well as rocks of various chemical compositions. Software should be use at least two energy levels for solution of multi-phase problems. Data stored and transferred for processing. Since the early 1980s, a number of electrical imaging techniques based on capacitance, resistance, or inductance measurement at low frequencies have been developed for the monitoring of