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9.3 EXPANDING TECHNOLOGY REVIEW

During the course of this study, several hundred wells in Kuwait were sabotaged by Iraqi petroleum engineers in the Gulf War. Many new devices and procedures were developed by inventors, engineers and service companies in direct response to this disaster. Some of these are being employed in Kuwait at the time of this writing.

Traditional firefighting methods have also been used in Kuwait with varying results. Several new "wrinkles" have been made to these procedures in the field with interesting and often good results.

Some of the new oilfield firefighting concepts and procedures may be applicable, with modification, to subsea blowout control particularly in vertical intervention procedures. Tools such as inflatable stinger packers are an example. Sub-in devices of different types may also be utilized for offshore blowout control in the future.

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air devices can be performed since it is the participants to choose.

There has not, as yet, been a major pollution-causing blowout in deep water since 1987. Studies indicate that there have been no long-lasting effects from that or any other incident including large tanker spills in 1989 and 1990. Thus, there is little urgency to develop new equipment and procedures for such incidents recognizing the low probabilities of their occurring.

Phase II may be indicated in the future. Continuing into Phase II is not warranted at this time, however.