Drilling Contractor (2005)

HARM MILL CONTROL Cubible No. Washingto Court Today's complex drilling operations demand sophisticated well-control modeling tools

On S Ropp, Wed Stee Demonics All

THE COMPLEXITIES OF Index's drilling operation including despector drilling, shallow natur or gas flow problens, SPET will and multiple drilling appropriate demand modeling inels to be able to accompanily place and predict those types of operations.

The challenges being a well central intervention task force all the even more substantial for all these types of speculius and a significant effort about them. here he placed or up from risk reduction measures.

The hydraulic mobiling tools required for talk reduction procures are tokend available inday for those year of operatime both to be used in contin-gency planning and during a self-restive incides.

For disposity and knimale correlated design drives the Includes what kind of soutement and inch to use, which bismoon tick tection to see so well so how the operation should be entirelied.

aim mided in he configuracy well attraction. pieceting presson. The force in tion on being also to respond to a hopethetical well exertal betalent, or men as

insertant's here a reduce the risk of the #-Elity operation This world, for marrow, include today, assemption about the oughing elization. over so well design and operational pro- in the analysing plane, a well control.

MELL COBTRIL DESIGN

A remedal will cottrol operation to regale control of for instates; a blowner well receipts of force equally important

- * The analysing door.
- . * The planning phase:
- · The convolute shows

for all throse phases the well exceed made office place an insperiors and and and attenthe decision making towards a success-Bel aperation.

ERSEIDER IRE DRITTLER

When facing a well centred technic the first challenge is in sendow the engine studies thoroughly. It manual be

leads about he want to streak to the Allbrest interestint option. Sued on the results; the experienced well control stufference care divides on the boost may for ward and further estimate the resources required to perform the place.

INICATION OF THE SPERATION

When the operation to regal control heading the bush-find had should be expressed to an eperative carefully in order for the engineers to continuously update their plans. It changes here to be made during the execution, the effect of the changes out by tosted in the motion before the well matted task here take the appropriate

CONTINUES NET PLAN

response for a drilling opention, resilient of affident, son resented element in the preevaluation of the possibility of regaining neatred of a blowing to substy mor and polyclos could be occasiveation

A restrictency plan will have an the abihis to regula control. The plan could plan and operational expertise analysis for a Mineral Intersection execution. Shortfully our then be identified and approprisix action taken to reduce the deficienries early in the planning phase.

A continguous plan will typically include the following party:

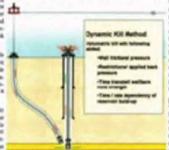
- . Define worst open accounting based on the strilling and development plan;
- * Catrolice manifesta blowest rate for the defined sentarios.

Santa Seaster 200

* Evaluate percented kill options:

CONTINGENCY PLAN

evaluation of emergency tion, onshore or offshore, one element is the pre-Even though the probabiliof a blowout might be small, could be catastrophic.



Breat intersection options are dependent upon a surgey target such as well. Even though the probabil-The name driving elements are making or taking and one the professible and most and uplos for solid. One consequences with respect

> stressed snough how important thinline phone in Neveral incidents in the past have recovered due to absorbed and our ration based on Smited and wrong

simulator abould politely be used toursdie to carried for situation is dured beliefing well pressure, temperatures Salid types and raise Furthermore, and alling should be used to racapture the attsection to the well prior to the tordinal and as such releases the tradorstonling

PLANSING THE OPERATION

When the well structure in fully understreed, the detailed self mettrel planting BRILLING CONTRACTOR

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