## SOLUTION MINING RESEARCH INSTITUTE

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MEETING

PAPER

Title <u>Solutions to Problems Associated With Large O.D.</u> Casing Utilized as Production Strings in Cavern

Casing Utilized as Production Strings in Storage Wells.

## ABSTRACT

Six problems are consistently present when running large O.D. casing as production strings in cavern storage wells:

Thread cleaning on location; connection sealing; backoff of couplings; economical and reliable casing connections; string failure due to flow and temperature fluctuations; quality control in operating and running procedures.

A new corrosion inhibitor may be applied which does not have to be cleaned or removed prior to application of the running compound. It is a non-toxic, biodegradable solution which forms a monomolecular film that attaches to all metal surfaces through ionic action.

A gray, anaerobic thread compound can be applied over the above corrosion inhibitor to provide downhole sealing integrity, consistent make-up lubricity, and prevent mill end turns or connection back-off. An extremely close tolerance eight round or buttress casing connection provides an economical and rugged cavern well connector.

Failures due to cyclical flow, vibration and temperature variances can be eliminated by installation of a torque stop ring in the "J" area of the above described coupling.

Rig site running procedures and quality control for the "System" described above can be provided at regularly held schools in Houston. Material presented in the school is applicable to a number of areas of field and rig operating procedures.

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