LANDSLIDES AND RELATED FEATURES

IN THE ESTILF PGINA, OKLAHOMA

May 18, 1989

U.S. Geological Survey

AREA DESCRIPTION TO SHOWS SLIDING AND SLOPE \n
PROBLEMS

Problems relating to sliding and slope instability include:

1. Landslides, sinkholes, and other surface \n
instabilities which may cause damage to \n
structures, roads, or other utilities.

2. Gullies and erosion problems which may \n
cause water runoff and sedimentation in \n
stream channels or water bodies.

3. Hydrogeologic issues related to slope \n
instability, such as seepage and surface \n
water problems.

METHODS OF STUDY \n
The following methods were used to map \n
landslides and related features:

1. Aerial photography

2. Topographic mapping

3. Field observations

4. Geologic mapping

5. Hydrogeologic studies

6. Geotechnical evaluations

7. Geophysical surveys

8. Remote sensing

AREA LOAD PATHS TO LANDSLIDES

The following load paths were used to \n
predict the potential for landslides:

1. Vertical loads

2. Shear forces

3. Tensile forces

4. Bending moments

5. Pore-water pressures

6. Seismic loads

7. Wind loads

8. Ice loads

REFERENCES AND ACKNOWLEDGMENTS

The following references and acknowledgments were made in \n
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