

## GREATER LOS ANGELES ENERGY MEETING APRIL 26-27

The International Society For Geothermal Engineering (ISGE) will again join the Los Angeles Council of Engineers and Scientists (LACES) for the 3rd Greater Los Angeles Area Energy Symposium at the Hyatt Regency Hotel, Los Angeles, California, April 26, 1977.

Nationally-recognized energy speakers have been scheduled for opening and luncheon sessions. A full day of workshop sessions will be devoted to discussions and papers related to solar, wind, geothermal, fossil fuel, nuclear and other energy sources along with consumer, environmental and economic matters. All formal papers will be printed in a copyrighted volume of Proceedings which is furnished to all registrants.

A Tutorial Seminar on Geothermal Service Equipment will follow on April 27th at the Hyatt Regency under the sponsorship of ISGE. This will be a technical training session related to auxiliary equipment required in the utilization of geothermal heat.

The topics for study for this session will include the theory of cooling towers; cooling tower selection and application; the fundamentals of pumping fluids; selection and application of pumps for cold and heated fluids; shut-off and automatic control valves; heat exchanger practice; the chemical controls for closed water systems; automatic controls and similar equipment related to geothermal utilization. A workbook will be furnished to all seminar registrants.

Applications for the Tutorial Seminar will be handled by ISGE. Inquiries for both meetings may be addressed to: ISGE (MEETINGS), P.O. Drawer 4743, Whittier, CA. 90607.

Roger Moore, C.F. Braun Company, Alhambra, California, telephone (213) 570-2073, is General Chairman for the Third Annual Greater Los Angeles Energy Symposium which is held in conjunction with AACE, AIAA, AIChE, ASCE, IEEE, ASME, ISGE, STC and other Los Angeles Sections of Societies affiliated with LACES.

A full day of geothermal energy presentations is expected for both meetings.

### GEOTHERMAL IRRIGATION GETS GOOD CROP YIELDS IN IDAHO EXPERIMENTS

The nation's first controlled agricultural experiment on raising crops irrigated with geothermal water has shown good yields and no measurable uptake by crops of geothermal water minerals at ERDA's Raft River geothermal site near Malta, Idaho.

A chief purpose of the experiment was to investigate the possibility of adverse mineral effects on crops raised with geothermal irrigation. Experiments at ERDA's Idaho National Engineering Lab are continuing to further study mineral uptake and determine whether crop yields can be increased by using the warm water to start growth earlier in the spring and continue it later in the fall.

Utah State University and Idaho Agricultural Extension Agents participated in the INEL studies. Area farms provided the land and part of the services through contracts with ERDA.

Crops grown included wheat, barley, oats, grasses, alfalfa, potatoes and garden vegetables. No measurable difference in trace minerals was detected between crops irrigated with geothermal water and those using river water.

For the next few years, a controlled experi-

ment being conducted by INEL scientists at Raft River will evaluate long term crop performance and soil conditions as a result of irrigating with geothermal water.

### HOPKINS PROMOTED BY W-K-M

*Missouri City, Texas* — Robert V. Hopkins has been named manager-quality assurance for W-K-M Valve Division, it was announced by Wendyl A. Reis, assistant general manager of W-K-M Valve Group of ACF Industries, Incorporated.

Mr. Hopkins had been a senior engineer in the W-K-M's quality control department. He is a native of Buckholts, Texas.

ACF's W-K-M Valve Group develops, manufactures, and markets valves and controls for use in oilfields and pipelines; in refineries and chemical, plastics, food processing, and paper plants; and in conventional, nuclear, and geothermal steam facilities for generating electric power.

Other ACF units build, sell, and lease railroad freight and tank cars; manufacture automotive fuel system components for original equipment and replacement markets; and provide engineered industrial plastic shapes and parts, hose, and coating powders for a wide range of applications.



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LOGAN

Dr. DAVID WALKER — MR

SALINE + ALKALAI SOIL

SALINITY

Dr. PETERSON USU

SALTY H<sub>2</sub>O

NO DIRECT APPLICATION 200% OF SPRINKLING

MORE DAMAGE WITH HOT SALT

ONE LARGE APPLICATION IS BETTER THAN MANY SMALL

NOT FEASIBLE IN SOME SOIL

300°F

DAMAGE WITH HOT WATER

LAND IS NOT SUITABLE FOR IRRIGATION

WATER IS SO SALTY EPA RESTRICTIONS

MAY CONTAIN HIGH FLORIDE • DANGEROUS •

WILL NOT GO INTO PLANTS FROM SOIL BUT SPRINKLING

NAF IS TWICE AS COMPLICATED AS CAF

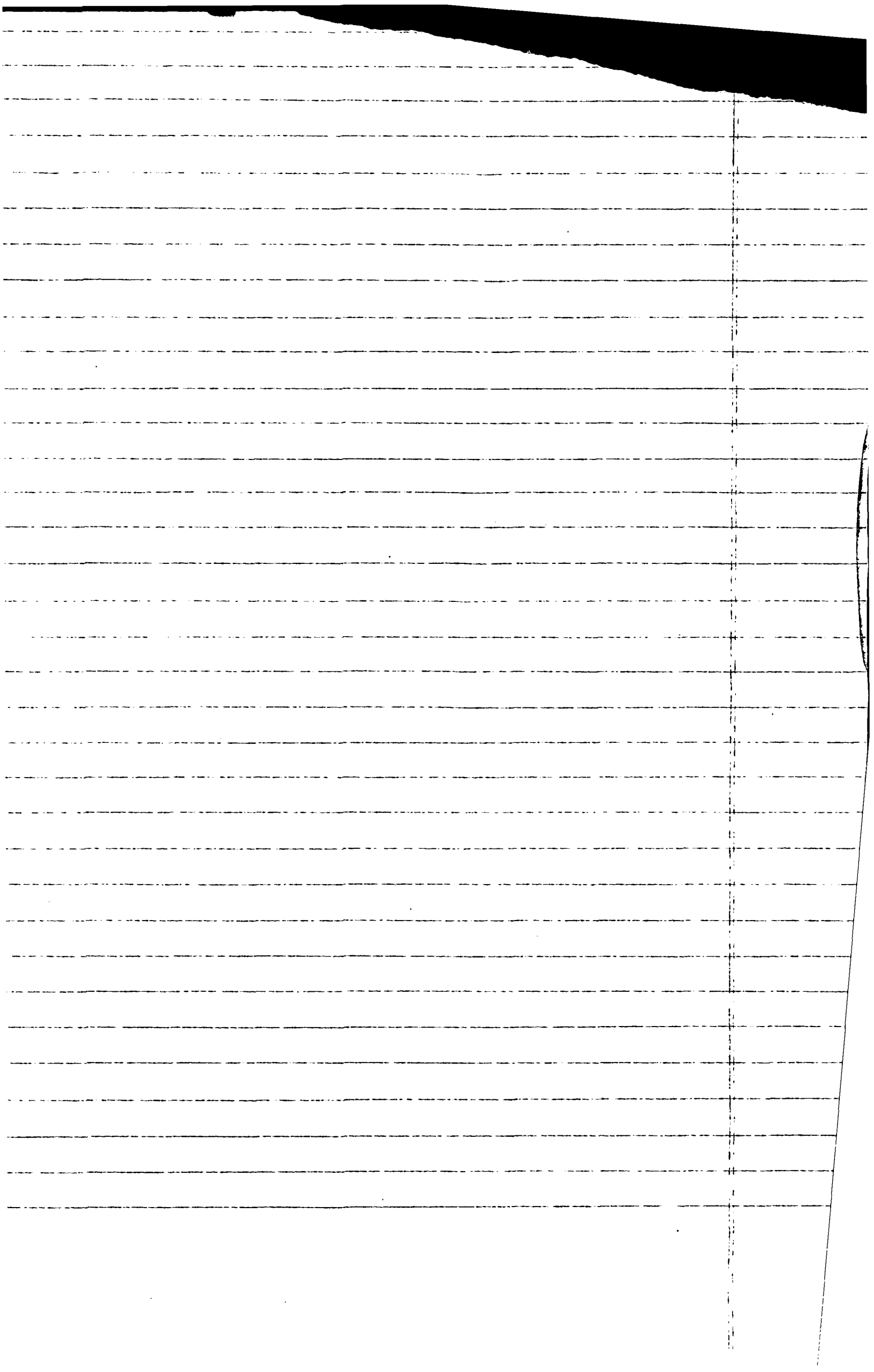
SOIL HEATING

OREGON ||

MINNESOTA

TVA

SUE SPEPE



MR LAMAR MASON : DEPT O. AGRICULTURE

MERLIN BOSWELL : SALT TOLERANCES  
SOIL CONSERVATION SERVICE WRITE LETTER

PAUL DANIELS : UTAH STATES 9-533-5745

DR JACOBS : IE + ME UOF U ~~6~~ 7106

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