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MESSAGE:

INFORMATION ON MSA SENSOR

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TO

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TANKGARD® Leak Detection System

Section 5, Principle of Operation

Post-It™ brand fax transmittal memo 7671		# of pages > 1
To: Kendall Vines	From: Bill Brand	
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**Section 5
Principle of Operation**

Sensor Operation

The sensor is a solid state sensor consisting of a heater and a sensitive semiconductor film. As petroleum vapors make contact with the sensor, absorption occurs on the semiconductor film, increasing sensor conductivity. This conductivity change is converted to a voltage output which is logarithmically proportional to the amount of petroleum vapor present.

Liquid Sensor Operation

The liquid sensor is a solid state sensor consisting of a thermoconductive sensing element heated to a high temperature. As a liquid with thermal characteristics differing from air makes contact with the liquid sensor, the thermal change is converted to a voltage output which turns ON the alarm.

Circuit Description

(FIGURE 5-1)

