

# Los Angeles City Fire Department

## TRAINING BULLETIN

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### A NATURAL GASOLINE LEAK

On Monday morning at 9:41, February 27, 1956 the Los Angeles Fire Department received, what seemed to be, a notification of a routine gas leak. The location was given as Sepulveda and Cashmere Streets and a first alarm assignment was dispatched to the scene. Upon arrival of the Battalion Chief a preliminary size-up indicated that a serious situation existed due to a ruptured high pressure Natural gasoline line, sometimes referred to as Casing-head gasoline. The seriousness of this emergency was later substantiated by the movement of this flammable vapor through the sewer system to points as far as 5 miles south of the break. The fact that numerous fires occurred and four people were badly burned because of ignition of these vapors at various locations, would ordinarily appear to be a blight against our fire and life loss record. However due to the amount of flammable gas and the extensive area involved many authorities have claimed that a major disaster was averted through the coordinated efforts of the Fire Department, Police Department, Utility Companies, and other agencies.

### CAUSE

A mechanical ditch digger first broke off a small part of a 12-inch sewer line located in a pit about 16 feet below ground level. Sometime later the ditch digger struck and ruptured a 4-inch Natural gasoline transmission line which was operating at a pressure of about 325 p.s.i. The gas line was located about 3 ½ feet below ground level in the same pit and about 15 feet from the break in the sewer line.

It was estimated that this particular gasoline contained a large amount of L.P. gas with a vapor pressure of about 60 lbs. and that during the 60 minutes before a shut-off could be effected, 21,000 gallons escaped through the crack in the ruptured line. Of this a considerable amount in vapor and liquid form flowed into the sewer through the broken opening. Its subsequent vaporization and expansion caused flammable gases to permeate the sewer system as far as 5 miles south of the break. Large amounts of vapor also flowed out of the pit and into the atmosphere near the break, dissipation here was later aided by a slight easterly breeze.

Natural or Casing-head gasoline is a product of crude petroleum and is usually extracted from Natural gas. It is used for commercial gasoline blending and for the recovery of specific flammable liquids and gases. It may contain the following products in various combinations: methane, ethane, butane, propane, pentane and hexane.

