## Page 2

- 1. Well Control Equipment:
  - A. Flare line with electronic igniter or continuous pilot.
  - B. Choke manifold.
  - C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit.
  - D. Auxillary equipment to include: annular preventer, mud-gas separator (if necessary), rotating head, and flare gun with flares.
- 2. Protective equipment for essential personnel:
  - A. 5-minute escape units located in the dog house and 30-minute air units at briefing areas, as indicated on well site diagram.
- 3.  $H_2S$  detection and monitoring equipment:
  - A. 3 portable  $H_2S$  monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when  $H_2S$  levels of 20 ppm are reached.
  - B. 1 portable  $SO_2$  monitor positioned near flare line during  $H_2S$  flaring operations.
- 4. Visual warning systems:
  - A. Wind direction indicators as shown on well site diagram.
  - B. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at a reasonable distance from the immediate location.
- 5. Mud program:
  - A. The mud program has been designed to minimize the volume of  $H_2S$  circulated to the surface. Proper mud weight, safe drilling practices, and the use of  $H_2S$  scavengers when necessary will minimize hazards when penetrating  $H_2S$  bearing zones.
  - B. A mud-gas separator and an  $H_2S$  gas buster will be utilized if necessary.